

**NATIONAL TRANSPORTATION SAFETY BOARD
Office of Research and Engineering
Vehicle Recorder Division
Washington, DC 20594**



GROUP CHAIRMAN'S FACTUAL REPORT OF INVESTIGATION

DCA07MM015

**By
Christopher Babcock**

WARNING

The reader of this report is cautioned that the transcription of a voyage data recorder audio recording is not a precise science but is the best product possible from a Safety Board group investigative effort. The transcript or parts thereof, if taken out of context, could be misleading. The transcript should be viewed as an accident investigation tool to be used in conjunction with other evidence gathered during the investigation. Conclusions or interpretations should not be made using the transcript as the sole source of information.

NATIONAL TRANSPORTATION SAFETY BOARD
Vehicle Recorder Division
Washington, D.C. 20594

August 23, 2007

Voyage Data Recorder

Group Chairman's Factual Report By Christopher Babcock

A. EVENT

Location: Icy Straits, Alaska
Date: May 14, 2007, 0130 Alaska Standard Time (AST)¹
Vehicle: *M/V Empress of the North*, International Maritime
Organization (IMO) #9263538
Operator: Majestic America Line
NTSB Number: DCA07MM015

B. GROUP A group was convened on July 16, 2007.

Chairman: Christopher Babcock
Vehicle Recorder Specialist
National Transportation Safety Board

Member: Rob Jones
Marine Safety Investigator
National Transportation Safety Board

Member: Randy Burns
Vice President of Technical Operations
Majestic America Line

Member: Tim Farley
Project Manager
United States Coast Guard

¹ All times are referenced to local AST

C. SUMMARY

On May 14, 2007, the United States flag vessel *M/V Empress of the North*, operating as a passenger carrying pleasure cruise with a complement of 75 crew and 206 passengers, ran aground at 0130 AST on Rocky Island in the Icy Straits approximately 22 miles southwest of Juneau, AK. The vessel began taking on water and the passengers and non-essential crew were evacuated to vessels responding to distress calls. The *Empress of the North* sailed under Coast Guard escort to Juneau. No injuries were reported among passengers or crew.

D. DETAILS OF INVESTIGATION

On June 11, 2007, the NTSB Vehicle Recorder Division's Audio Laboratory received information from the following VDR:

Recorder Manufacturer/Model: **Avecs MER**
Recorder Serial Number: **00331420802**

Recorder Description

According to Chapter V of the International Convention for Safety of Life at Sea (SOLAS) Regulation 20 and federal regulations, VDRs are required aboard all passenger vessels manufactured before July 1, 2002, that engage in international voyages by January 1, 2004. The *Empress of the North's* keel was laid in February 2002 and was fitted with a VDR in December 2003.

VDRs are required to store the last 12 hours of bridge audio, radar, and IEC 1162² National Marine Electronics Association (NMEA) parametric data in crash protected memory units. Means must also "be provided whereby recorded data may be saved after an incident with minimal interruption to the recording process."³

Recorder Damage

The VDR suffered no damage during the grounding and remained aboard the vessel. Safety Board investigators downloaded all stored data onto a portable hard drive which was returned to the Safety Board's Surface Recorder Laboratory.

VDR Contents Description

Four data archives were downloaded from the VDR (Table 1).

Table 1 VDR Contents

Date	Bridge Audio	Radar	NMEA
2/18/07	0921-0938 AST	0920-0938 AST	0723-0940 AST
2/18/07	0958-1014 AST	0946-1014 AST	0500-0815 AST
5/13-14/2007	2226-1031 AST	2340-1040 AST	1100-1031 AST
5/13-14/2007	2353-1258 AST	2358-1258 AST	1200-1159 AST

² IEC Document 1162 – Maritime Navigation and Radiocommunication Equipment and Systems – Digital Interfaces

³ IMO Assembly Resolution A.861(20) Performance Standards for Shipborne Voyage Data Recorders

Archives one and two were stored to the hard drive during an IMO required annual performance test and inspection of the system by Avecs personnel. At 1031, approximately nine hours after the grounding and after the vessel had returned to Juneau, the crew initiated the emergency backup creating archive three. Archive four contains data from the last twelve hours of operation that is automatically stored to the hard drive.

The VDR records one channel of mixed audio drawn from six microphones in and around the bridge as well as the audio from a single VHF frequency. Microphones are located at the port and starboard side of the front desk, the chart table, aft bridge area, and the port and starboard bridge wings. The bridge audio ranges from fair to good quality⁴. Portions of the audio were unintelligible due to the close proximity of commercial satellite and VHF radio speakers to the VDR microphones. Non-pertinent conversation close to one or more microphones also masked relevant bridge conversation.

Post-display selection radar imagery⁵ from the Furuno FAR-2127 radar is captured every 15 seconds and stored to the VDR as a compressed bitmap image. The images stored to the VDR show the exact radar image displayed to the crew on the bridge including targets, ranges, and settings. The status and display of other radar systems that may have been in use is not recorded. Vessel parametric data is recorded as NMEA sentence fields. The following valid NMEA fields were recorded:

- wind speed and angle
- water speed and heading
- water depth⁶
- time and date
- true heading
- rate of turn
- geographic position
- datum reference
- recommended minimum specific GPS data
- port and starboard rudder command
- course (COG) and speed (SOG) over ground
- watertight and fire door status

The VDR installed on vessels subject to the SOLAS carriage requirements must also record engine order, engine response, and rudder response. These parameters were not present of the *Empress of the North's* VDR. The last IMO required inspection of the VDR aboard the *Empress of the North* took place on February 17-18, 2007. The inspection report noted deficiencies in the engine, rudder, and main alarm recording systems, but a certificate of compliance was issued nonetheless.

Transcription of relevant bridge audio, NMEA, and radar data may be found in appendices to this report. The complete set of radar and NMEA data may be found the public docket for this accident under separate cover.

⁴ See attached audio quality scale

⁵ Post-display selection radar imagery includes "electronic signal information...which was actually being presented on the master display of the radar at the time of recording. This shall include any range rings or markers, bearing markers, electronic plotting symbols, radar maps, whatever parts of the of the SENC (system electronic navigation chart) or other electronic chart or map that was selected, the voyage plan, navigational data, navigational alarms and the radar status data that were visible on the display." (IEC 61996-1, Voyage Data Recorder Performance Requirements)

⁶ Some water depth data is invalid. Only valid data points are plotted in Appendix B.

Timing and Correlation

Timing on the transcript was established by converting the audio file time reference recorded as Universal Coordinated Time (UTC) to local AST by subtracting eight hours. Radar and parametric data was time stamped similarly. Because the audio, radar, and parametric data all share a common time reference no further correlation was necessary.

Description of Audio Events

The accident events take place within the time periods covered by archives three and four. The accident third mate enters the bridge and takes over the watch at approximately 2322 AST the night of May 13. The transcription includes the watch change, the events spanning approximately thirty minutes prior to the accident, the accident, and post-accident events.

Christopher Babcock
Vehicle Recorder Division

Audio Quality Rating Scale

The levels of recording quality are characterized by the following traits of the voyage recorder information:

Excellent Quality	Virtually all of the crew conversations could be accurately and easily understood. The transcript that was developed may indicate only one or two words that were not intelligible. Any loss in the transcript is usually attributed to simultaneous bridge/radio transmissions that obscure each other.
Good Quality	Most of the crew conversations could be accurately and easily understood. The transcript that was developed may indicate several words or phrases that were not intelligible. Any loss in the transcript can be attributed to minor technical deficiencies or momentary dropouts in the recording system or to a large number of simultaneous bridge/radio transmissions that obscure each other.
Fair Quality	The majority of the crew conversations were intelligible. The transcript that was developed may indicate passages where conversations were unintelligible or fragmented. This type of recording is usually caused by bridge noise that obscures portions of the voice signals or by a minor electrical or mechanical failure of the VDR system that distorts or obscures the audio information.
Poor Quality	Extraordinary means had to be used to make some of the crew conversations intelligible. The transcript that was developed may indicate fragmented phrases and conversations and may indicate extensive passages where conversations were missing or unintelligible. This type of recording is usually caused by a combination of a high bridge noise level with a low voice signal (poor signal-to-noise ratio) or by a mechanical or electrical failure of the VDR system that severely distorts or obscures the audio information.
Unusable	Crew conversations may be discerned, but neither ordinary nor extraordinary means made it possible to develop a meaningful transcript of the conversations. This type of recording is usually caused by an almost total mechanical or electrical failure of the VDR system.

Appendix A

Bridge Audio Transcription

Transcript of bridge audio from *M/V Empress of the North* which ran aground on Rocky Island in the Icy Straits, AK, at 0130 AST on May 14, 2007.

LEGEND

2M	Voice identified as the second mate
3M-1	Voice identified as the accident third mate
3M-2	Voice identified as the second third mate
AB-1	Voice identified as the accident AB
AB-2	Voice identified as second AB
CPT	Voice identified as the captain
OS	Voice identified as the OS
CM	Voice identified as the chief mate
CE	Voice identified as the chief engineer
OIL	Voice identified as the oiler
USCG	Transmission from United States Coast Guard Sector Juneau
ES	Transmission from the <i>Evening Star</i>
PA	Transmission made over the vessel's public address system
VHF	Transmission made or received over VHF radio
UHF	Transmission made or received over crew handheld emergency radios
?	Unidentified voice
*	Unintelligible word
#	Expletive
@	Non-pertinent word
[]	Editorial insertion

Note 1: Times are expressed in Alaska Standard Time (AST).

Note 2: Generally, only radio transmissions to and from the accident vessel were transcribed.

Note 3: Words shown with excess vowels, letters, or drawn out syllables are a phonetic representation of the words as spoken.

Note 4: A non-pertinent word, where noted, refers to a word not directly related to the operation, control or condition of the vessel.

TIME and
Source

Communication

Radar Imagery

2230:01

START OF RECORDING

2322:59

START OF TRANSCRIPT

2322:59

[sound of music in background continues throughout recording]

2322:58

2M

how's it going buddy?

2322:59

3M-1

going all right.

2322:59

2M

good good good.

2323:23

3M-1

**.

2323:15

2M

uhhhhh it may not give it a second until it settles down. **.

2323:18

2M

yeah. that's fine. **.

2323:25

3M-1

what what that flashing thing?

2323:25

2M

no no no no. that cursor *.

2323:28

3M-1

all right all right.

2323:32

2M

I think that's the reef.

2323:34

3M-1

yeah I agree.

2323:37

2M

how'd you sleep?

TIME and
Source

Communication

Radar Imagery

2323:37 3M-1	all right.	
2323:41 AB-?	well that could be the point of this island.	
2323:46 2M	I don't know *. no actually * 'cause that was at four point four earlier this is showin' up at *.	
2324:09 3M-1	where the hell did that **?	
2324:48 ?	[sound similar to barking]	
2324:48 ?	how weird Matt dog.	
2324:58 ?	* too much of this stuff.	
2325:00 2M	couple of the bandmembers have started their own band. for the most part its for the most part its old dead songs.	
2325:10 AB-2	yeah its playin' by themselves.	
2325:14 ?	this is the uh three point eight *.	
2325:25 2M	it might be. its not— well its nobody with an AIS.	
2325:52 ?	its to the right ** where's that tug?	
2325:59 2M	when you do have boats forget turn to on the lights. uhhhh I haven't seen it but @ said that he has. I think so.	
2326:08 3M-1	all right **. yeah.	
2326:21 2M	* nice and bright. uh so you gotta be aware about that.	
2326:22 3M-1	* it usually come up on the radar?	

TIME and
Source

Communication

Radar Imagery

2326:27 2M	oh yeah actually we we separate right behind ** three centimeter radar. ***.
2326:37 3M-1	yeah.
2326:43 2M	we could sit here **. some people **.
2326:56 2M	like over there that one right there **.
2327:04 3M-1	all right. and what's that vector line?
2327:13 2M	that one is that one right there is AIS. AIS its been there all night. so because AIS says its there our radar says AIS. AIS says the closest thing is a tugboat. * so we're not concerned with that. that's just *. **.
2327:40 3M-1	all right.
2327:42 2M	and then uh...
2327:46 AB-?	we're abeam of Point Whidbey though.
2327:49 2M	are ya
2327:49 AB-?	yeah.
2327:50 2M	thank you. actually—.
2327:58 2M	** position *.
2328:10 2M	* lines when we get to the top of uh ** we'll follow that line south *.
2328:24 3M-1	is this the waypoint?

TIME and
Source

Communication

Radar Imagery

2328:28
2M

this is what we'll go by ** we can adjust that basically its saying what we'll do is hit these waypoints. we're looking for time trying to slow down **. * here at uh two am.

2328:53
?

***.

2329:05
3M-1

all right.

2329:06
2M

that right there ***.

2329:19
2M

when we hit here Point Retreat ** just line that that out. Sisters * uh bring down the actual trackline * goes down here **. Nobeltec's got it. * good water * in the Icy Straits *** Icy Straits south of * Island you'll probably **.

2330:10
3M-1

right...okay.

2330:09
2M

hourly log entries describe **. and uh the captain would like us to put a fix in instead of going every hour or every half hour **.

2330:30

[sound of seven bells]

2330:31
3M-1

makes sense.

2330:32
3M-1

*.

2330:33
2M

exactly. um and it doesn't have to be on the hour * distance off.

2330:39
3M-1

okay. *.

2330:42
2M

and uh that way it helps me **.

2330:57
3M-1

all right.

2330:59
2M

um it also ** break out.

TIME and
Source

Communication

Radar Imagery

2331:13 3M-1	all right.	
2331:13 2M	its not new its just I **.	
2331:17 3M-1	okay. are you **?	
2331:20 2M	yes.	
2331:20	[forty-five seconds of unintelligible conversation]	
2331:58 2M	* northbound is * southbound.	
2332:11 2M	@ got it dialed in ** deer in the headlights. so—.	
2332:14 3M-1	[sound of laughter]	
2332:15	[sixty seconds of unintelligible conversation]	
2333:50 2M	yeah we're gonna use—. [sound similar to papers shuffling] we are going to—.	
23:34:26	[sound of several unknown individuals entering the bridge]	
23:34:26 ?	hey.	
23:34:27 ?	hey.	
23:34:27 ?	*.	
23:34:27 ?	what do you want?	

TIME and
Source

Communication

Radar Imagery

23:34:28 ?	* want to know how to * things.
23:34:29 ?	*.
23:34:30 ?	okay.
23:34:31 ?	is that okay?
23:34:32 ?	**.
23:34:34 ?	sure? here?
23:34:38 ?	tiny little red flashlight. I guess I don't need *.
23:34:39 ?	[fifteen seconds of unintelligible conversation]
23:34:52 ?	what is that flashing light?
23:34:53 ?	that's the light *.
23:34:55 ?	its cold in here.
23:34:56 ?	is that @ driving?
23:34:56 ?	what're you talking about? its hot.
23:34:59 ?	its freezing in here.

TIME and
Source

Communication

Radar Imagery

23:35:00
?

**.

23:35:01
?

I know he didn't.

23:35:03
?

freezing.

23:35:04
?

its cold.

23:35:08
?

@ I didn't know they let you drive.

23:35:10
?

sometimes they let me **.

23:35:10

[five seconds of unintelligible conversation]

23:35:15
?

uh *.

23:35:17
?

drove on autopilot one time for almost an hour and a half.

23:35:21
?

oh yeah? are you serious?

23:35:22
?

uh-huh.

23:35:23
?

put you to sleep?

23:35:24
?

no actually I was kind of nervous 'cause uh I don't know. I didn't feel like anybody was paying attention to me. * every once in a while * would call out a turn and I'd make it. *.

23:35:41
?

you want?

TIME and
Source

Communication

Radar Imagery

23:35:42
?

what the # do you want?

23:35:43
?

you're the one that keeps sitting next to me.

23:35:45
?

hey there's a party of reservations people in the Calliope.

23:35:48
?

#.

23:35:50
?

sorry.

23:35:52
?

actually I'm on my way back there now.

23:35:54
?

I dropped a— I dropped a tack and I need it. gimme your little red flashlight will ya.

23:35:54
?

**.

23:36:00
?

game on *.

23:36:03
?

you *.

23:36:04
?

and I'm off too.

23:36:07
?

well then you're ignorant.

23:36:08
?

here.

23:36:09
?

thank you.

TIME and
Source

Communication

Radar Imagery

23:36:10 ?	what did you just say?
23:36:11 ?	I said if you're not scared you're ignorant.
23:36:16 ?	**.
23:36:18 ?	sweet.
23:36:19 ?	*.
23:36:20 ?	Marino you're on the station bill .
23:36:21 3M-1	all right.
23:36:23 ?	you got duties.
23:36:24 3M-1	yeah.
23:36:25 ?	yeah.
23:36:25 ?	you're right the uh the chief mate **.
23:36:30 ?	yeah.
23:36:32 ?	actually you ** just kind of chill out. * all right.
23:36:38 ?	where are we?

TIME and
Source

Communication

Radar Imagery

23:36:39
?

**.

23:36:41
?

Point Whidbey.

23:36:42
?

**.

23:36:43
?

you're gonna hurt yourself. you're gonna hurt yourself.

23:36:49
?

dude I have bruises all over my legs.

23:36:51
?

I don't need to know that.

23:36:53
?

[sound of laughter]

23:36:53
?

* obviously.

23:36:57
?

** . one time maybe it was oh five on the way down we were in the ocean and it went um we hit nineteen point seven knots.

23:37:11
?

**.

23:37:13
?

wow.

23:37:14
?

that was fast. yeah we were all sitting there watching it.

23:37:18
?

*.

23:37:20
?

right now we're going twelve.

TIME and
Source

Communication

Radar Imagery

23:37:22
?

*.

23:37:23
?

we've done twenty one knots outside of Bonneville before.

23:37:26
?

really?

23:37:26
?

yeah.

23:37:27
3M-1

oh *.

23:37:28
?

comin' down?

23:37:29
3M-1

yeah.

23:37:31
?

*.

23:37:33
?

*.

23:37:37
?

don't touch it.

23:37:38
?

*.

23:37:42
?

I really don't want to work. I'm done.

23:37:48
?

there's a lot of reservations people here.

23:37:50
?

** did you meet 'em?

TIME and
Source

Communication

Radar Imagery

23:37:52 ?	no I decided now all these passengers come to me and say but reservations said this or reservations said that I'm gonna say you know what they have an office in cabin two fifteen.
23:38:02 ?	**.
23:38:05 ?	there you go.
23:38:08 ?	hmm?
23:38:08 ?	how many are in two fifteen?
23:38:10 ?	well there are two in there and then three twenty nine has two more.
23:38:16 ?	why so many?
23:38:18 ?	is there a shhh blond?
23:38:23 ?	um-hum.
23:38:24 ?	yup.
23:38:24 ?	I barely talk to her.
23:38:25 ?	she's in the Calliope.
23:38:26 ?	um-hum.
23:38:28 ?	okay 'cause uhhh she was actually supposed to bring something for me but she didn't...@ *.

TIME and
Source

Communication

Radar Imagery

23:38:35 ?	[sound similar to bridge phone]
23:38:35 ?	**.
23:38:39 ?	bridge * speaking.
23:38:41 ?	yeah she probably could have * caught in her grip.
23:38:44 ?	*.
23:38:45 ?	you rode the elevator with her?
23:38:48	[twenty seconds of unintelligible conversation]
23:39:10 ?	you can see my piercing.
23:39:05 ?	*. wait how much you *.
23:39:06 ?	you can see my piercing.
23:39:10 ?	**.
23:39:11 ?	that's kind of disgusting.
23:39:13 ?	* you wish.
23:39:20 ?	**.

TIME and
Source

Communication

Radar Imagery

23:39:21 ?	I don't have any piercings.	
23:39:27 ?	I don't even really **.	
23:39:28 ?	went from like nine piercings to—.	
23:39:37 ?	my friend @ we used to come up here and we'd get the wander and I'd wand her down she has piercings all over the place. [sound of laughter] it was fun. It'd be like beep beep beep beep what's that.	
23:39:50 ?	oh yeah ***.	
23:39:51 ?	* here let me see. let me see.	
23:40:03 ?	and I need to know what's got it.	
23:40:04 ?	what's up @?	
23:40:06 ?	what's up? here.	
23:40:07 ?	and how are you?	
23:40:09 ?	I gotta go.	
23:40:10 ?	hey we're just kind of * pretty much...	
23:40:13 ?	why are you short?	
23:40:18 ?	want us to come back?	

TIME and
Source

Communication

Radar Imagery

23:40:20 ?	* come CQ right?
23:40:22 ?	CQ now yeah.
23:40:23	[thirty seconds of unintelligible conversation]
23:40:44 ?	yeah but you're not short because you have four ABs and four *.
23:40:55 ?	its okay.
23:40:56 ?	**.
23:41:00 ?	ready?
23:41:01 ?	yeah.
23:41:04 ?	do you even know what you're looking at?
23:41:06 2M	***. this is our ETA for Bartlett Cove. we're lookin' for a uhhhh little *.
23:41:15 ?	yeah.
23:41:27 ?	now I'm not * I. what?
23:41:29 ?	I didn't say anything.
23:41:32 ?	all right boys.

TIME and
Source

Communication

Radar Imagery

23:41:33
?

okay *.

23:41:39
?

well goodnight.

23:41:40
?

goodnight @.

23:41:41
?

take a chair you got to bring it back.

2341:41

[sound of several people leaving the bridge]

2341:41
2M

umm...right now we're at nine hundred RPMs. we're not going to be able to maintain * knots. so just keep the bearing and reduce speed **. get there early * hang out point.

2341:50

[thirty seconds of unintelligible conversation]

2342:04
2M

my room is five **.

2342:35
2M

give me the speed I'm on right now so I *.

2342:36
?

**.

2342:40
3M-1

okay.

2342:48
2M

I think that's it. I think that's it.

2342:55
2M

we can give you the * right now.

2342:55
?

all right yeah.

2343:02
2M

three engines nine hundred RPMs.

TIME and
Source

Communication

Radar Imagery

2343:04
?

all right yeah.

2343:04
?

**.

2343:14
?

what's that?

2343:25
2M

all right give me a call if you need anything.

2343:25
3M-1

got everything I need.

[Break in transcription until 0100]

TIME and
Source

Communication

Radar Imagery

0100:01

[sound of music in the background continues throughout recording]

0100:05

AB-1

two sugars one creamer.

0100:09

OS

excuse me he said two creams and a sugar [sound of laughter].

0100:12

AB-1

two sugars one creamer.

0100:12

AB-2

oh sure blame it on me. we had a discussion and I said to get on the radio **.

0100:15

AB-1

do you want a coffee or anything?

0100:16

3M-1

no could you guys bring back a water. I don't know *.

0100:20

OS

yeah I can get you a cup.

0100:23

3M-1

yeah I appreciate it * water.

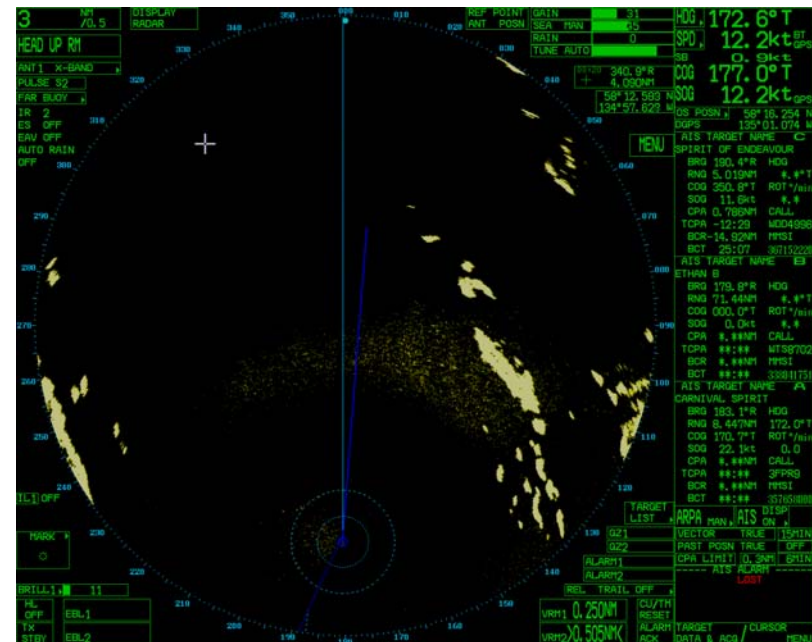
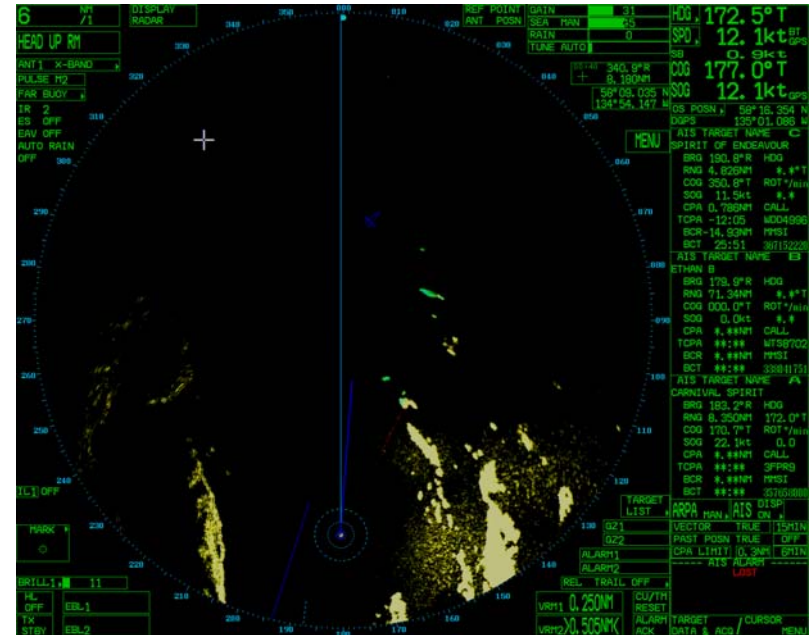
0100:26

[sound of two bells]

0100:28

OS

this this watch is going by fast.



TIME and
Source

Communication

Radar Imagery

0100:30

3M-1

are there any—. ** hourly rounds.

0100:34

OS

yeah and its already one oh clock.

0100:36

3M-1

its not bad.

0100:37

OS

no. I like it. man. kind of windy out there.

0100:44

?

**. .

0100:46

[sound similar to radio keying]

0100:52

AB-1

that @ a pretty good guy. he's been on the boat for a while.

0100:56

3M-1

yeah.

0100:57

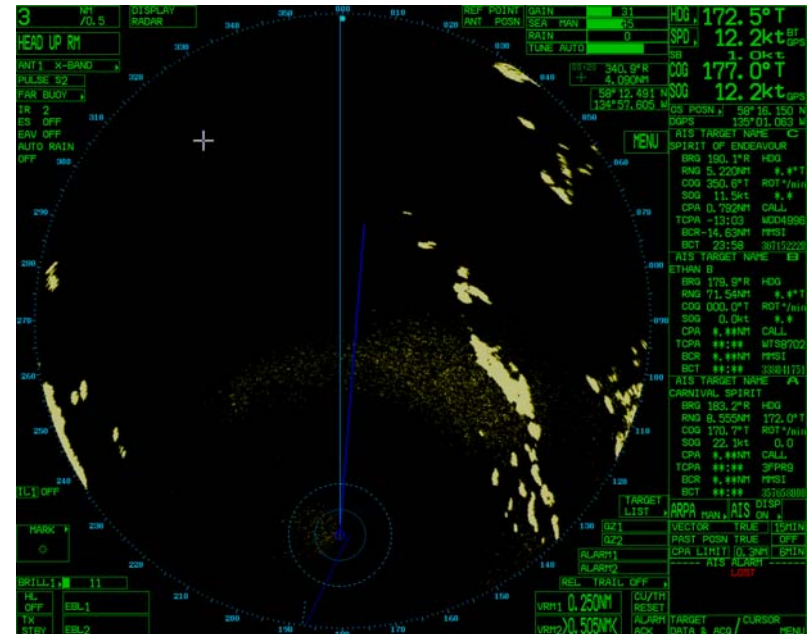
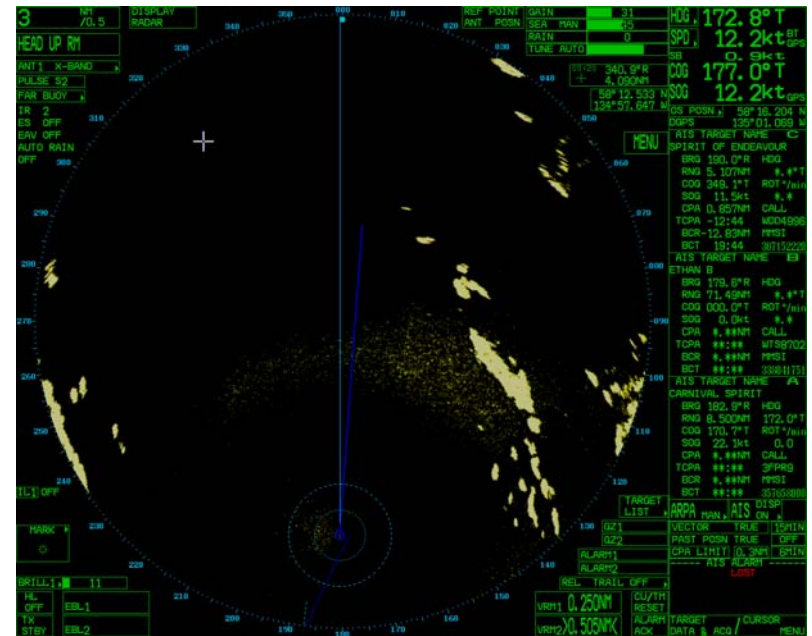
AB-1

AB for life.

0100:58

3M-1

yeah.



TIME and
Source

Communication

Radar Imagery

0101:00

AB-1

I don't think he'll ever go for a license.

0101:01

3M-1

yeah.

0101:04

AB-1

he's already got more than enough time for his AB too.

0101:06

3M-1

so what what is the difference between that between ordinary seaman and AB *.

0101:10

AB-1

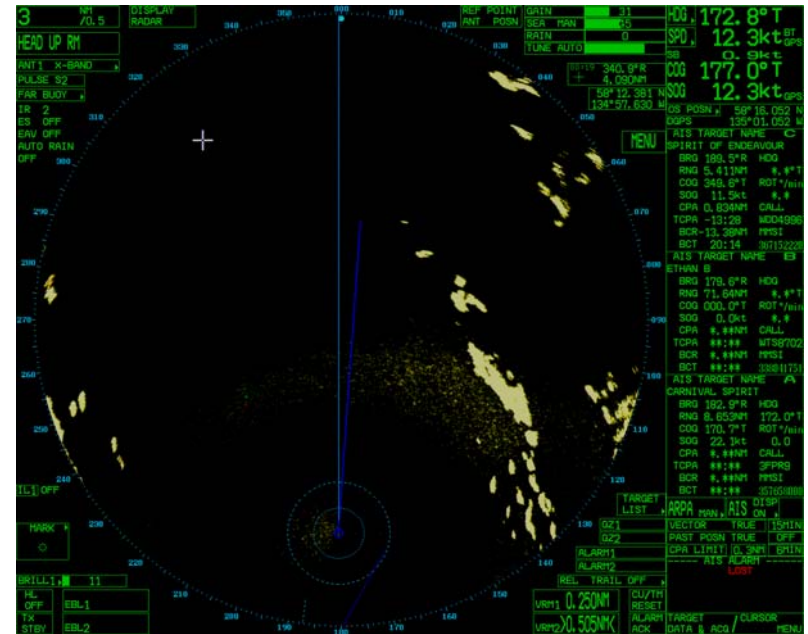
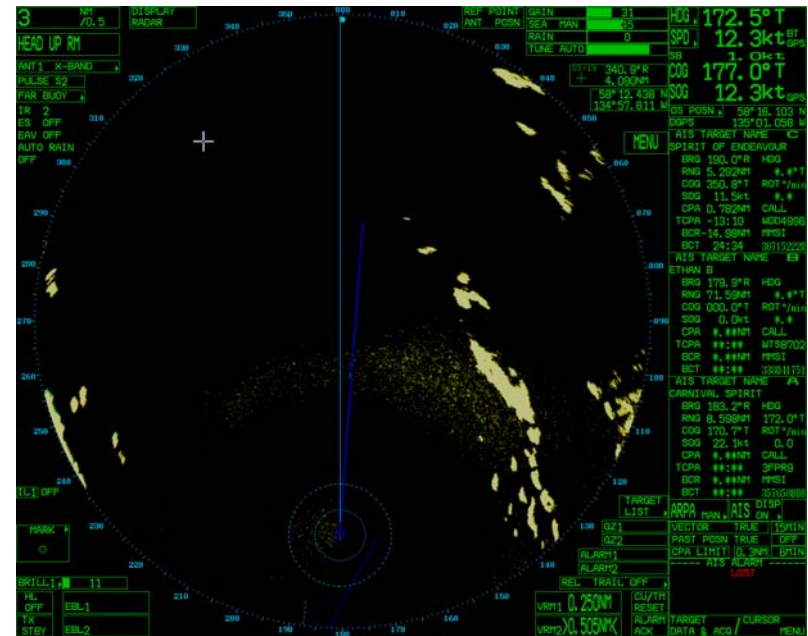
umm well it's a um basically is a three hundred sixty days for a AB special then you get your AB able seaman uh endorsement. and then you're allowed to work uh if you receive uh a rating for a nav watch um then you're allowed to sail international on international ships you're working as an able seaman. whereas as a as a OS you know you're not gonna get paid as much and you're just gonna be scrubbing uh scrubbin' toilets workin' in the galley. so—.

0101:11

3M-1

basically...uh huh...yeah...oh yeah...yeah.

0101:15



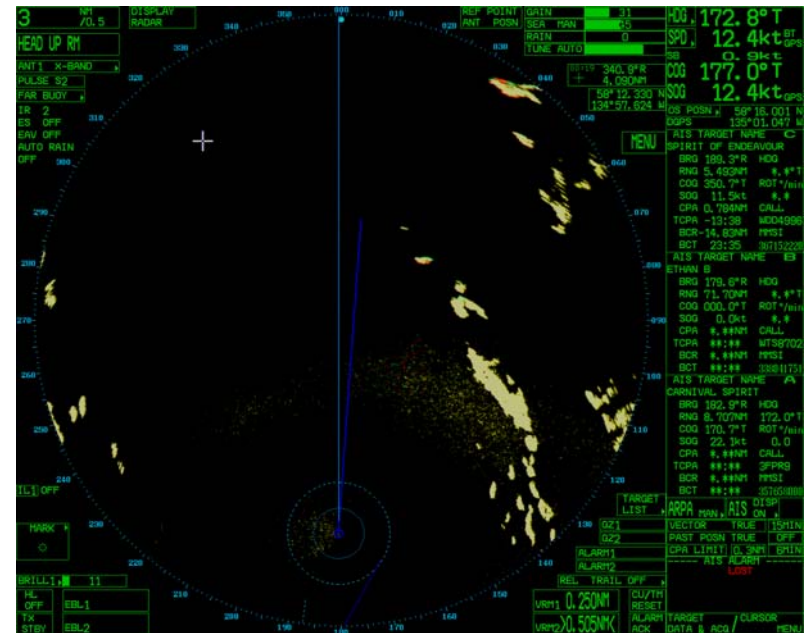
TIME and Source

0101:44
3M-1

Communication

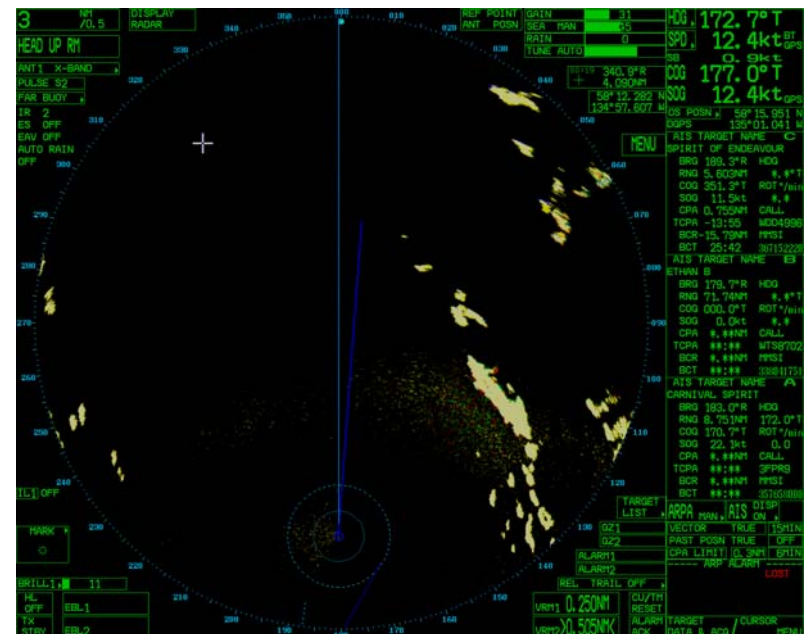
you know he should definitely get that AB ticket and then go out and see the world too and travel around and do somethin'.

Radar Imagery



0101:51
AB-1

exactly that's the way to do it.



0101:54
3M-1

he said he was young I don't even know how old he is *.

0101:59
AB-1

yeah he's like twenty-three twenty-four.

0101:59
3M-1

yeah.

TIME and
Source

Communication

Radar Imagery

0102:04

AB-1

yeah something like that yeah I think he's around twenty-three.

0102:11

AB-1

just one of those backwoods Castlerock boys you know.

0102:11

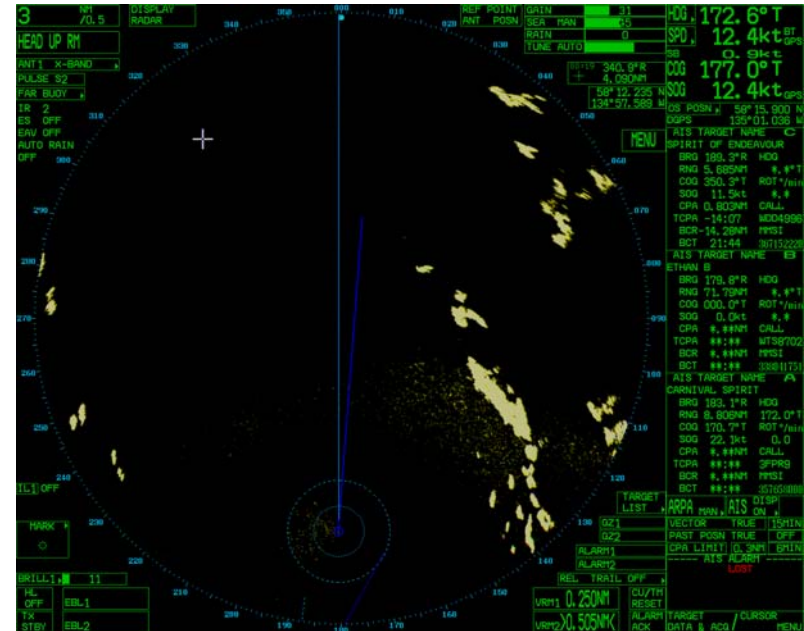
3M-1

yeah.

0102:13

AB-1

they picked up work on deck but he's been pretty solid all the way through.



0102:19

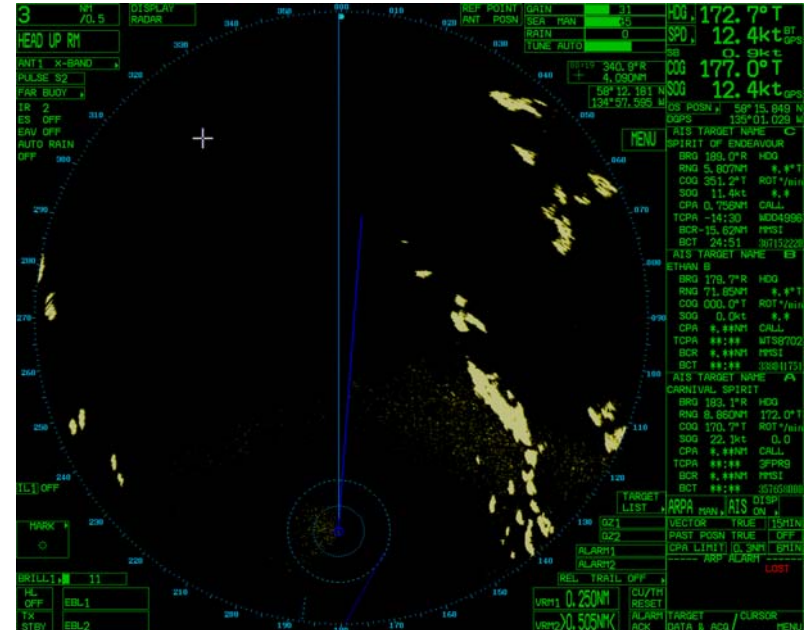
AB-1

you know he uh fell asleep at the wheel during the uh during the fall of last year and uh while he was driving his truck he rolled his truck broke his back punctured a lung fractured his skull but he uh he bounced back from it he was in a he was in a back brace for a long time. he came around out of it.

0102:19

3M-1

oh man...wow...oh man...wow...yeah...*.

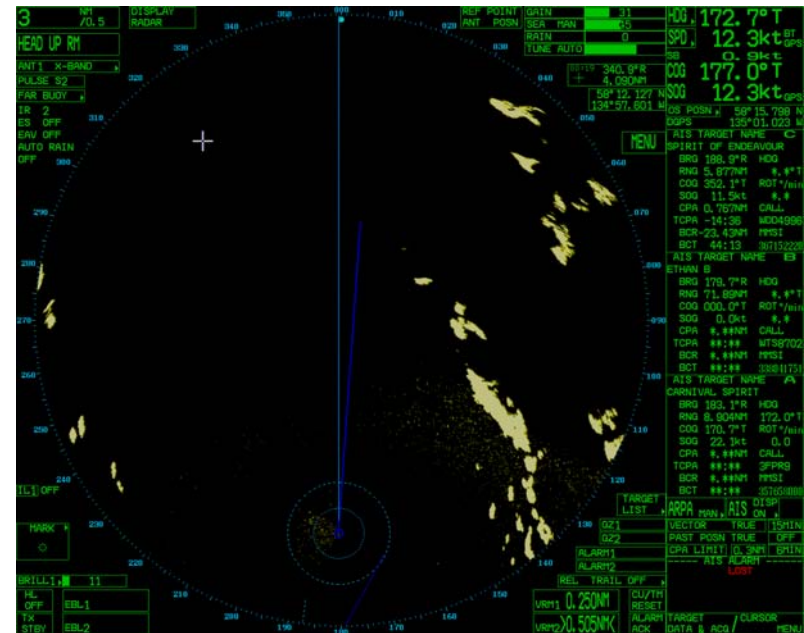


TIME and
Source

0102:30

Communication

Radar Imagery

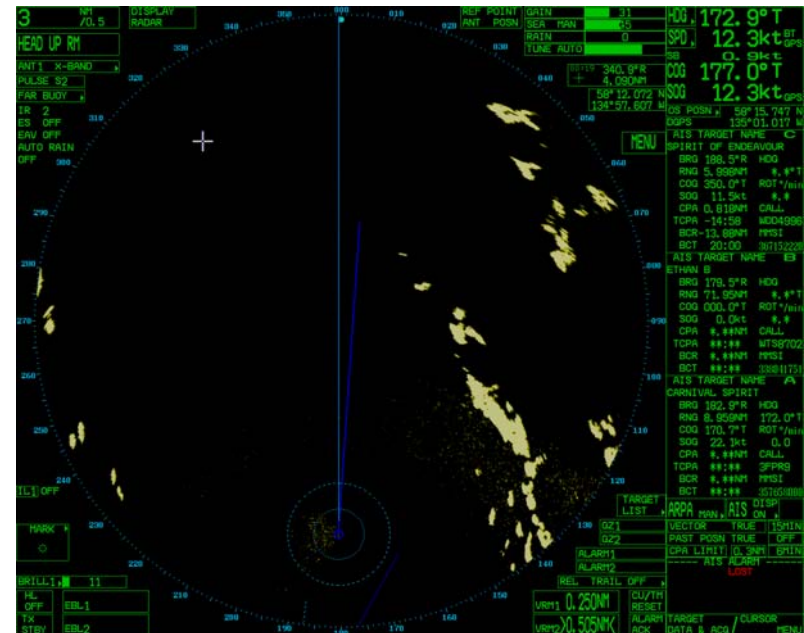


0102:47
AB-1

pretty amazing. [sound similar to yawn]

0102:59
3M-1

yeah pretty much have talked to everybody except @ and I haven't even seen him I've met him once and that was it.



TIME and
Source

Communication

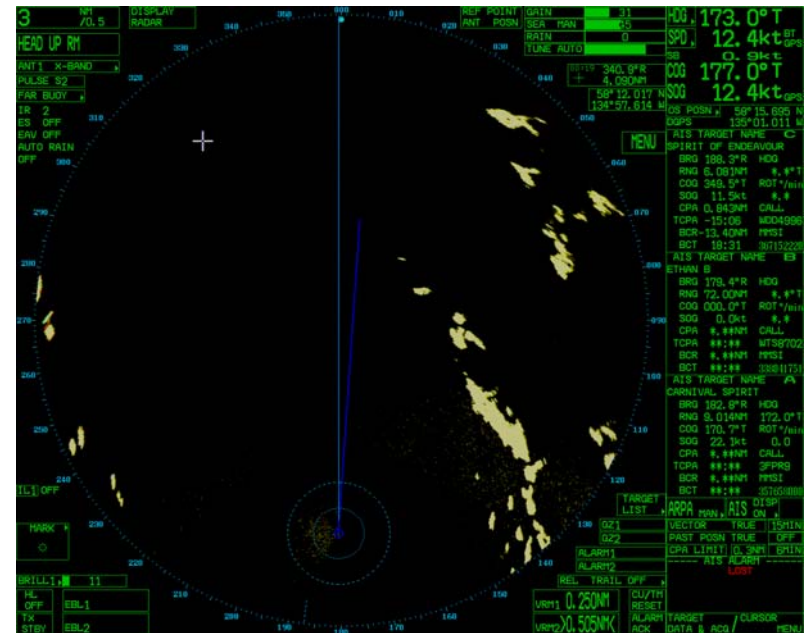
Radar Imagery

0103:09
AB-1 yeah.

0103:09
3M-1 everyone else ** the bar.

0103:13
AB-1 yeah I call @ Hollywood.

0103:14
3M-1 yeah why's that?



0103:17
AB-1 yeah you'll understand after you get to know him a little bit. Hollywood.

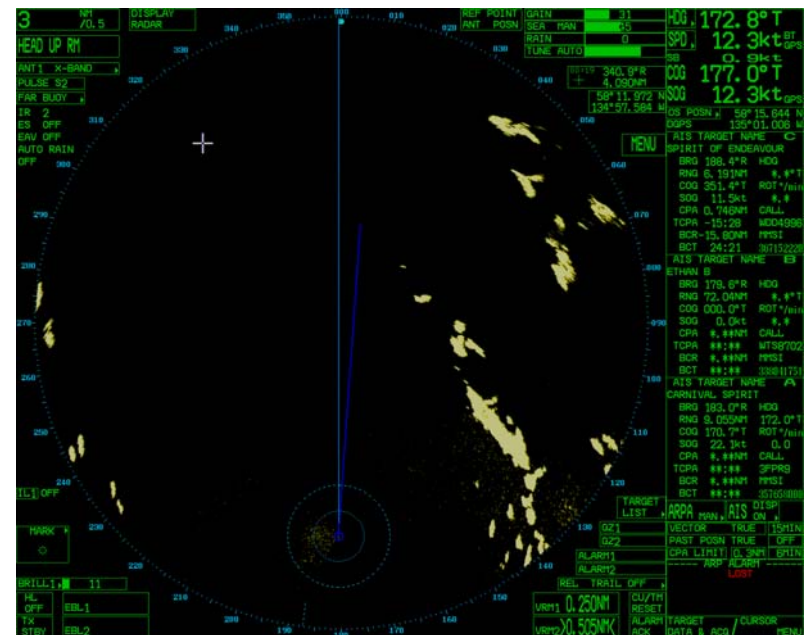
0103:18
3M-1 [sound of laughter]

0103:23
AB-1 do it. do it all.

0103:26
3M-1 yeah.

0103:26
AB-1 be the captain of the ship. soon as he gets his AB.

0103:28
3M-1 [sound of laughter]



TIME and
Source

Communication

Radar Imagery

0103:33

3M-1

does he have the time for that **.

0103:35

AB-1

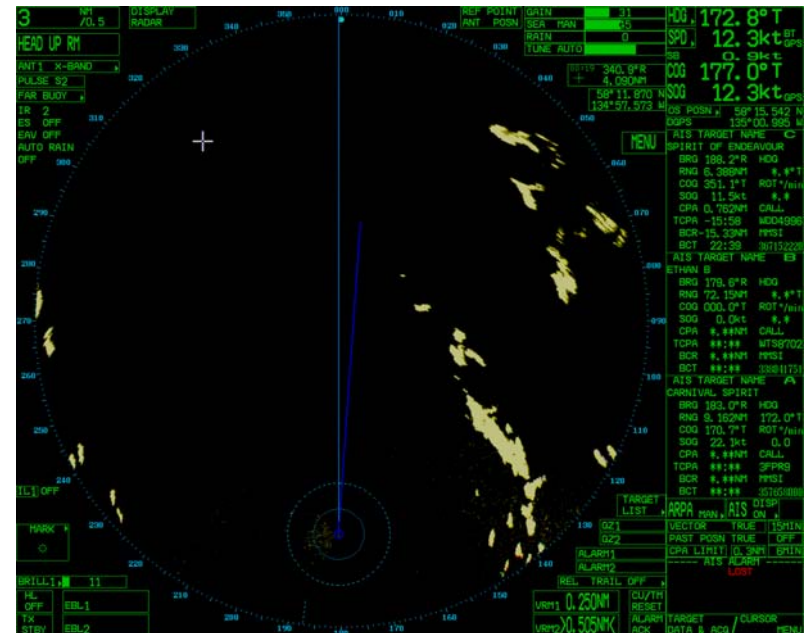
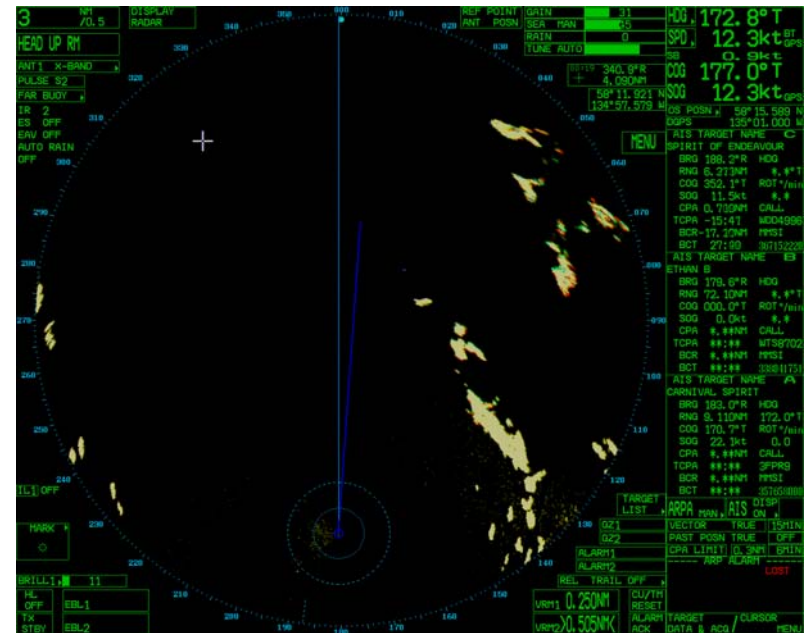
he's uh he's he's a ways from it. he's uh he just came to deck this year. he's real enthusiastic about learning. very enthusiastic about learning but he's uh he kind of gets ahead of himself starts believing he's uh been on ships all his life and that kind of causes a problem for him the chief mate gets all pissed off at 'em. and he ends up # something up and the chief mate gets pissed off at him and uh you know round and round it goes. you know its one thing about being enthusiastic about learning but you know don't want somebody who gonna you know not be truthful with you about things they don't know how to do.

0103:36

3M-1

yeah...uh...right...[sound of laughter]...yeah yeah yeah. yeah yeah.

0103:45

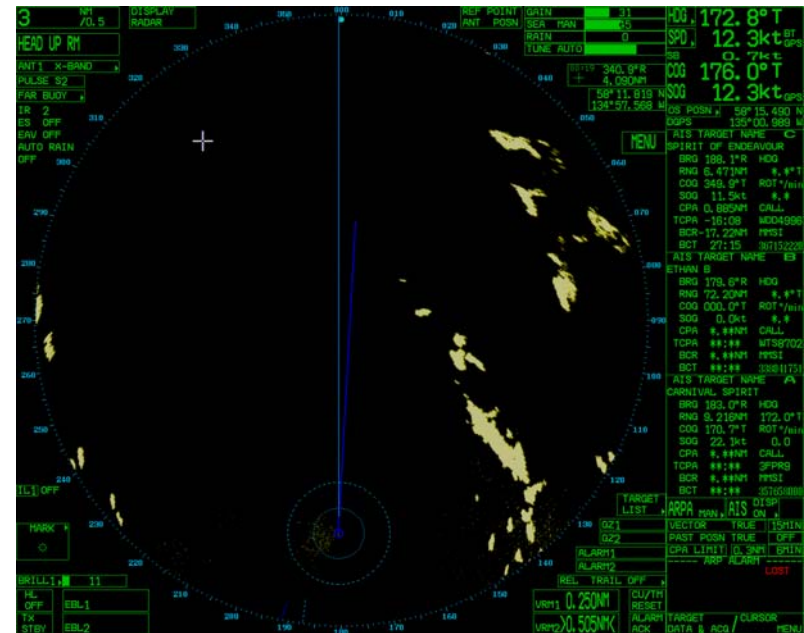


TIME and
Source

0104:00

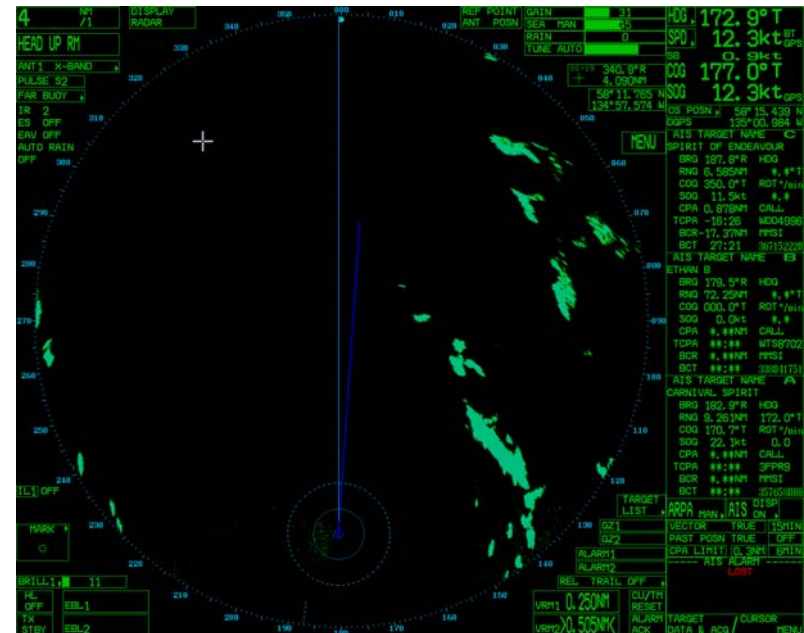
Communication

Radar Imagery



0104:28
AB-1

its unsafe. unsafe.



TIME and
Source

Communication

Radar Imagery

0104:32
3M-1

** AB.

0104:33
AB-1

thanks.

0104:34
OS

I put the lid on so I don't spill it.

0104:37
AB-1

is it getting windy out there?

0104:37
3M-1

* I appreciate it.

0104:40
OS

no I just didn't want to spill it.

0104:42
AB-1

oh okay. appreciate it.

0104:43
OS

bye now.

0104:44
AB-1

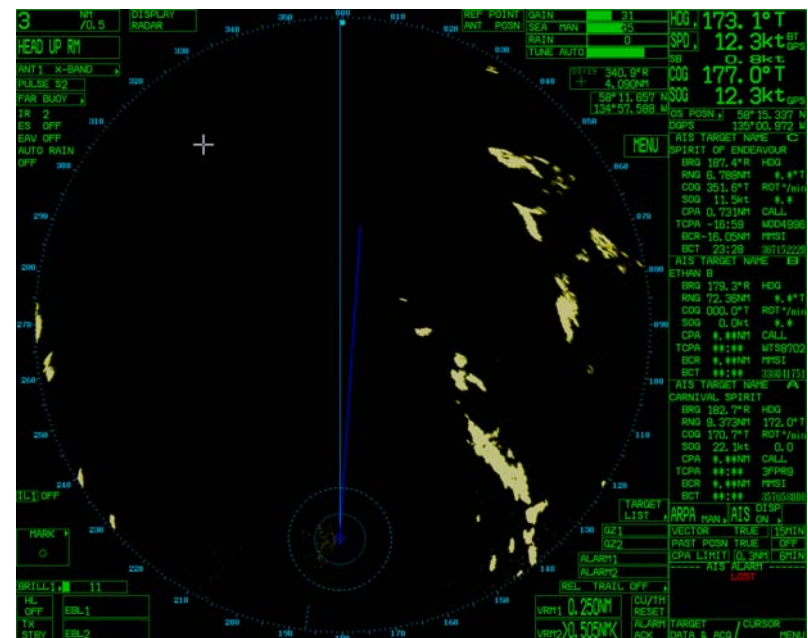
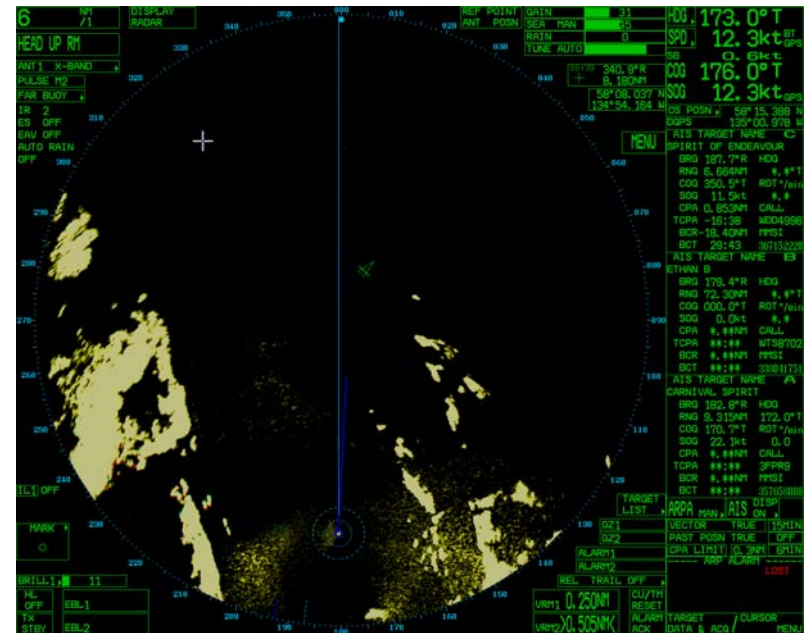
have a good round.

0104:48

[sound similar to door squeak]

0104:51
AB-1

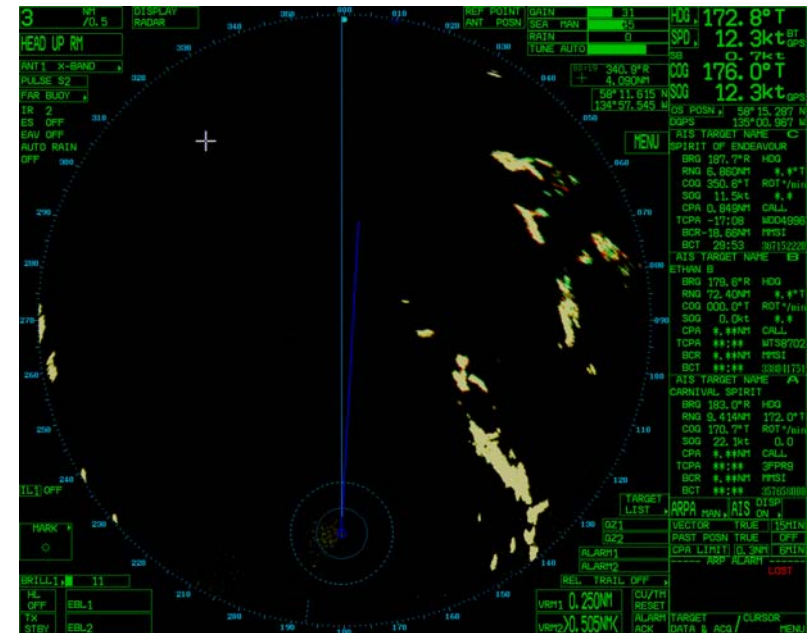
but you know on a personal level he's a nice guy you know he's funny
he's a lot of fun to be around but uh you know I mean uh as far as uh
you know ship— shipping ** you know * gotta watch him you know.



0105:14
?

Communication

Radar Imagery

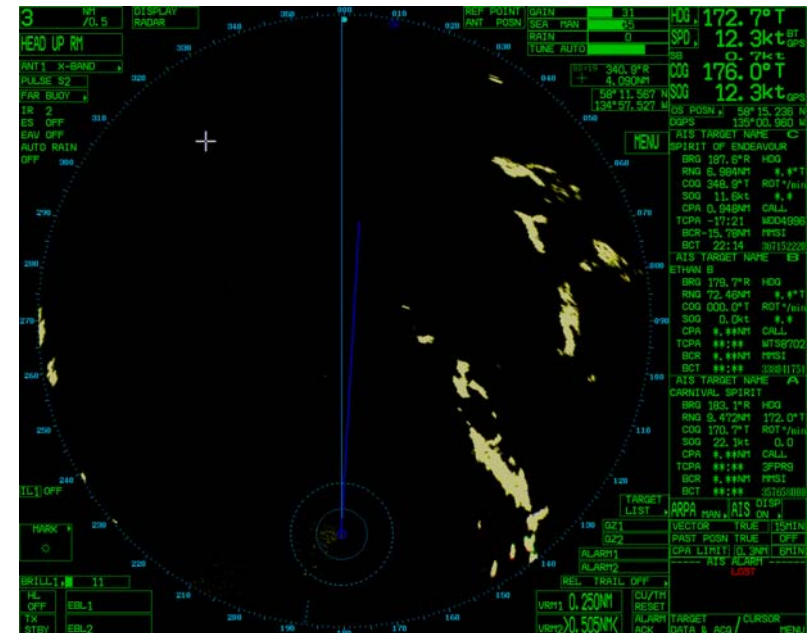


0105:21
AB-1

** pretty heavy but uh.

0105:25
3M-1

yeah ** trying to * right now.



TIME and
Source

Communication

Radar Imagery

0105:30

AB-1

our engineering department is really something else.

0105:34

3M-1

yeah. [sound of laughter]

0105:34

AB-1

they're remarkable.

0105:39

AB-1

yeah so what do you do in your off time whenever you're not shippin'?

0105:41

3M-1

man my off time was only about a about a couple like a week and a half. I graduated April twenty-eighth. and uh so yeah I don't really know yet. I still gotta find that on my off time.

0105:49

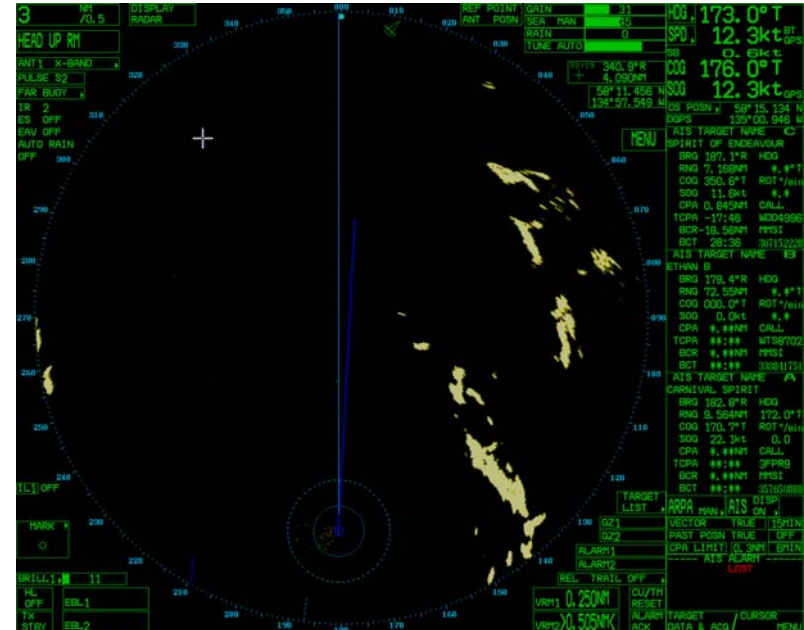
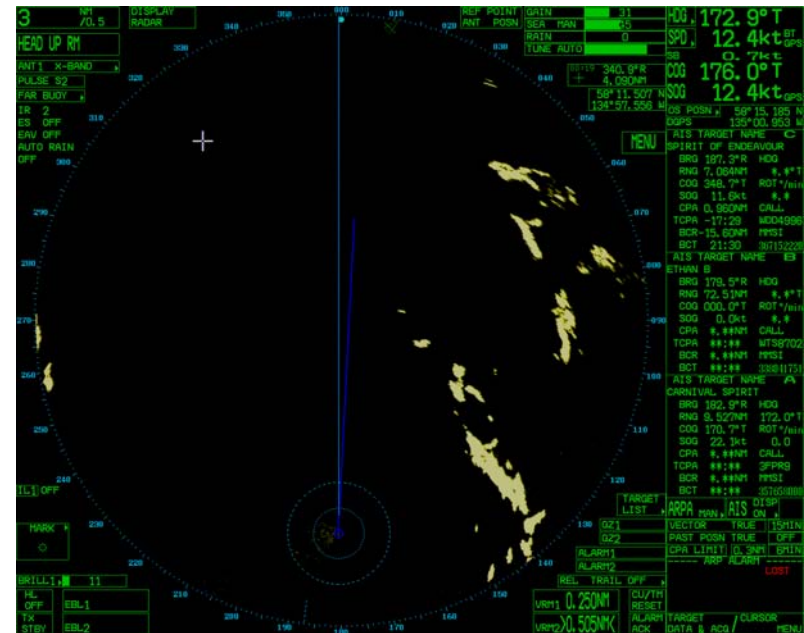
AB-1

oh really...oh wild.

0105:57

3M-1

but I went down to Vegas for the first time with my cousin and for the * boxing match with De la Hoya.



0106:05
AB-1

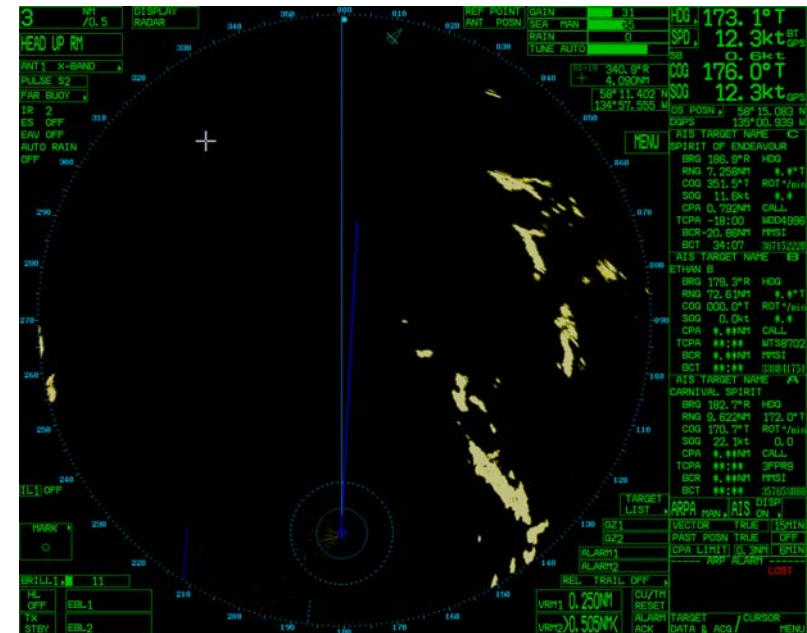
0106:09
3M-1

Communication

oh yeah? no kidding. wow.

yeah that was pretty good. I probably won't go back for a while but it was interesting to be there. um but for this next time off I'm gonna go out to New York I've got some family out there I thought I might go out there for a week.

Radar Imagery

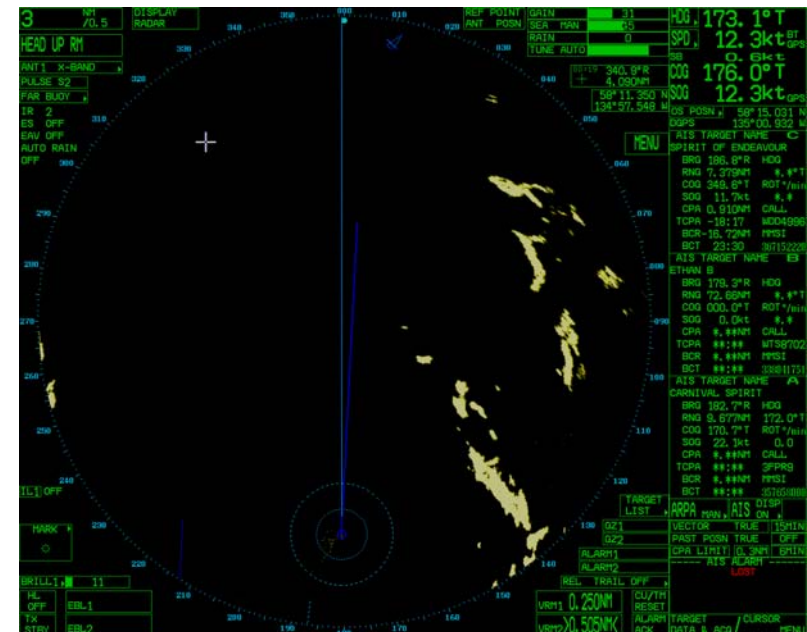


0106:16
AB-1

yeah...nice.

0106:26
3M-1

yeah but you know I don't know I'm not sure what I'm gonna do yet.
I'd like to travel definitely on my time off. I like doing that.



TIME and
Source

Communication

Radar Imagery

0106:37

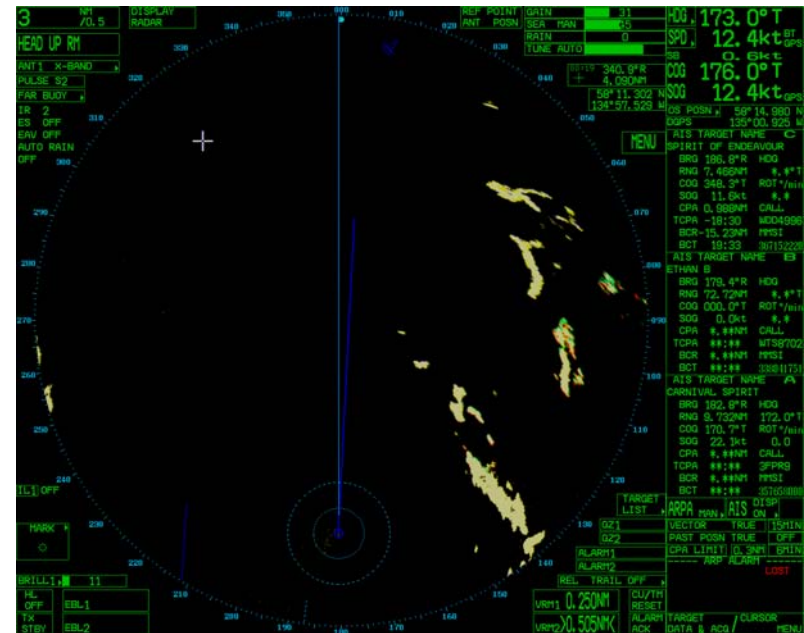
AB-1

yeah...go see the world for a while huh.

0106:42

3M-1

yeah...yup.



0106:45

AB-1

nothing wrong with that.

0106:47

3M-1

yeah its fun. and then uh I— I just like to I like to DJ you know I got some turntables and stuff at the house.

0106:57

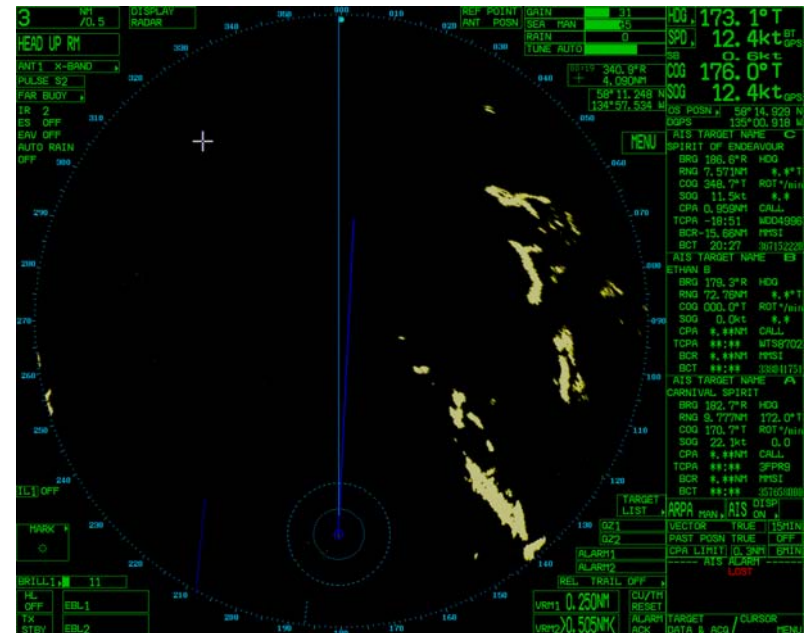
AB-1

oh no kidding. you like spinning huh? that's awesome.

0106:58

3M-1

yeah so I— I— do that keep busy doing that for a while just for fun.



TIME and
Source

0107:08
AB-1

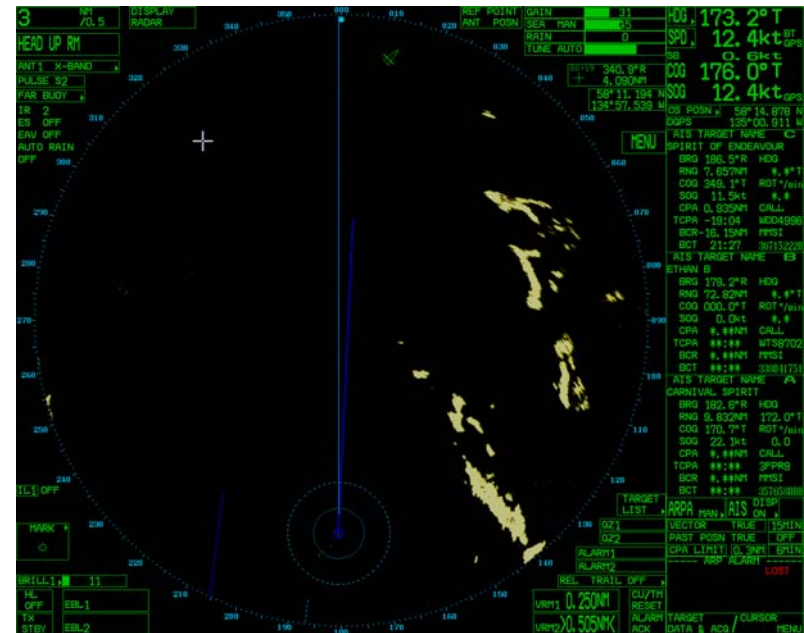
you ever spin in any clubs or anything like that?

0107:10
3M-1

I've been a couple bars ** San Francisco I've been a couple bars.
nothing real big. um just whenever they're like hey do you want to do
something. I don't really do it for the money. I just do it as a hobby
just for fun.

Communication

Radar Imagery

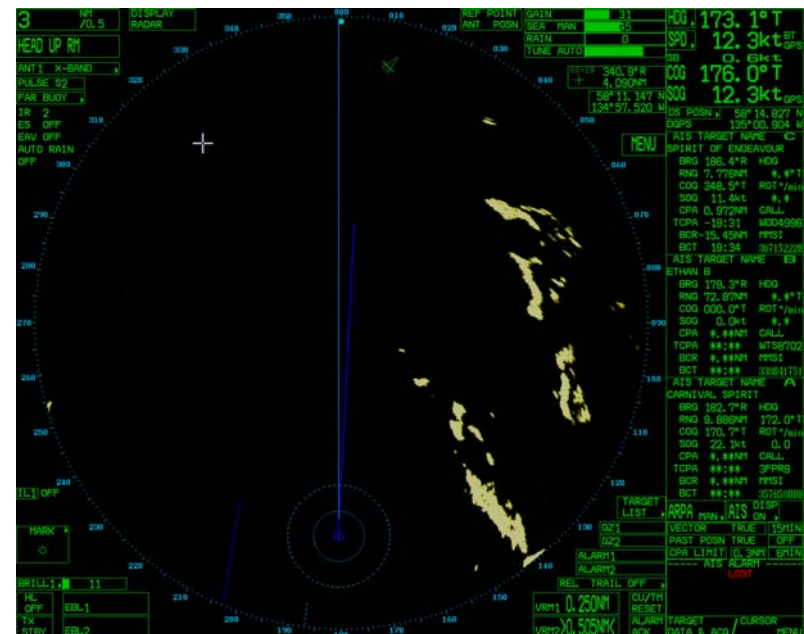


0107:27
AB-1

oh that's cool.

0107:29
3M-1

yup.



TIME and
Source

Communication

Radar Imagery

0107:30

AB-1

you're gonna like Portland then. Portland and Seattle.

0107:34

3M-1

yeah.

0107:36

AB-1

lot of opportunity for that stuff.

0107:38

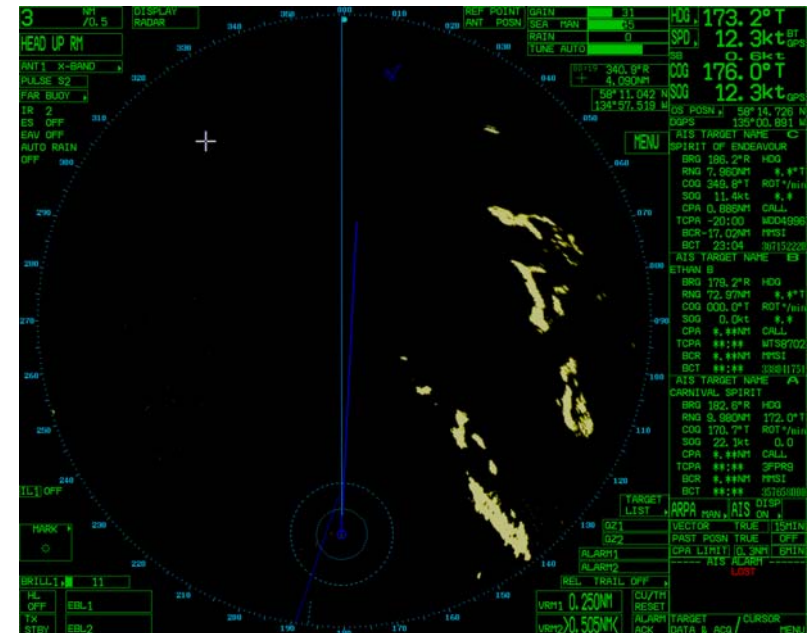
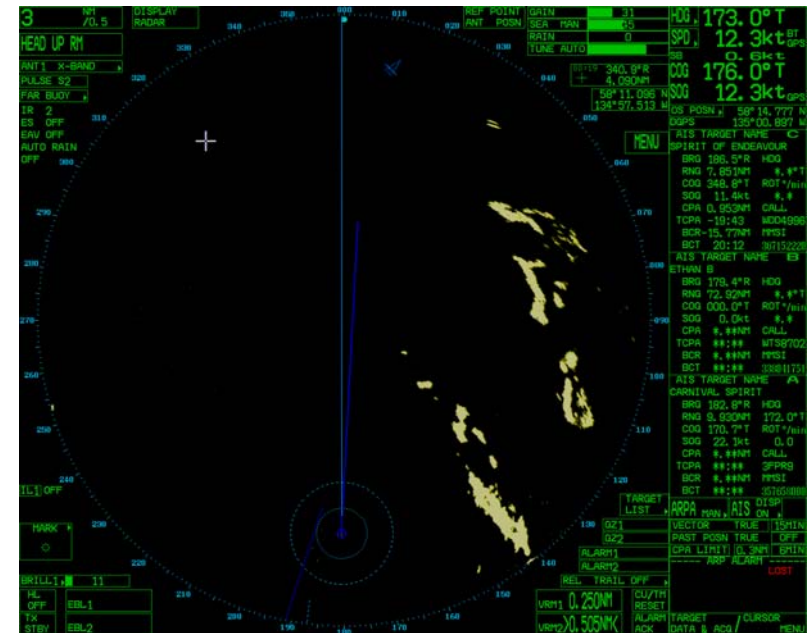
3M-1

yeah I've been to uh Portland a couple times and Seattle a little bit more but never really hung out for too long.

0107:46

AB-1

yeah. you know I got uh I got some acquaintances. they're all Russian. but they uh they all spin up in Seattle and all.



TIME and Source

0108:00

3M-1

oh yeah...that's cool.

0108:01

AB-1

you know they import pharmaceuticals make a lotta lotta money. most of them don't speak very good English and they spend all their weekends and most of their time in clubs uh spinning records and poppin' ecstasy **. some of them well some of them are pretty wild about it and you know there's a couple of 'em that are real straight and narrow that don't mess with it.

0108:09

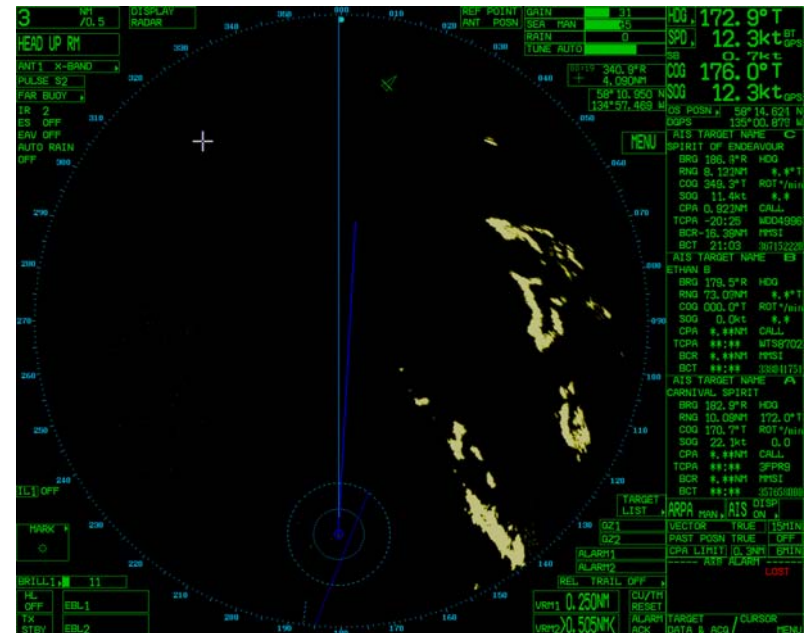
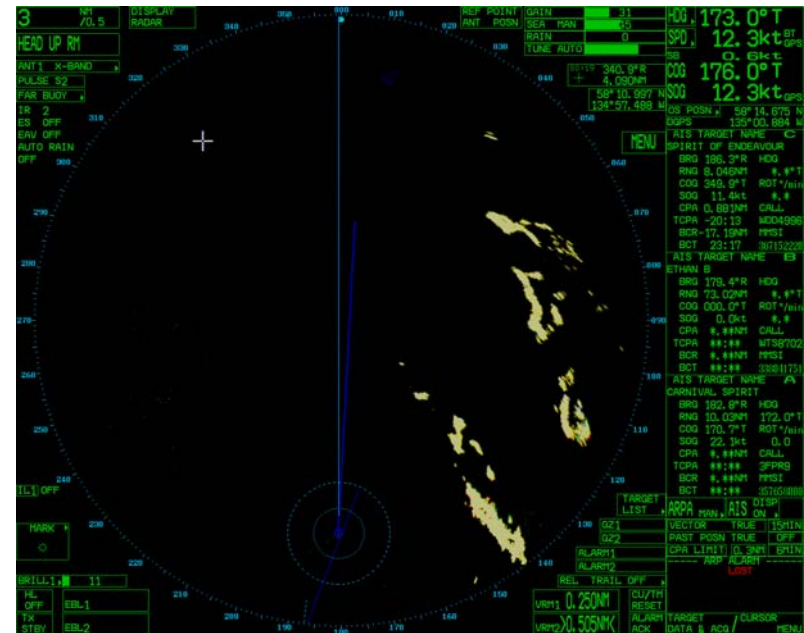
3M-1

yeah...uh huh...[sound of laughter]...yeah...uh.

0108:15

Communication

Radar Imagery



TIME and
Source

Communication

Radar Imagery

0108:32

AB-1

they make a fortune.

0108:32

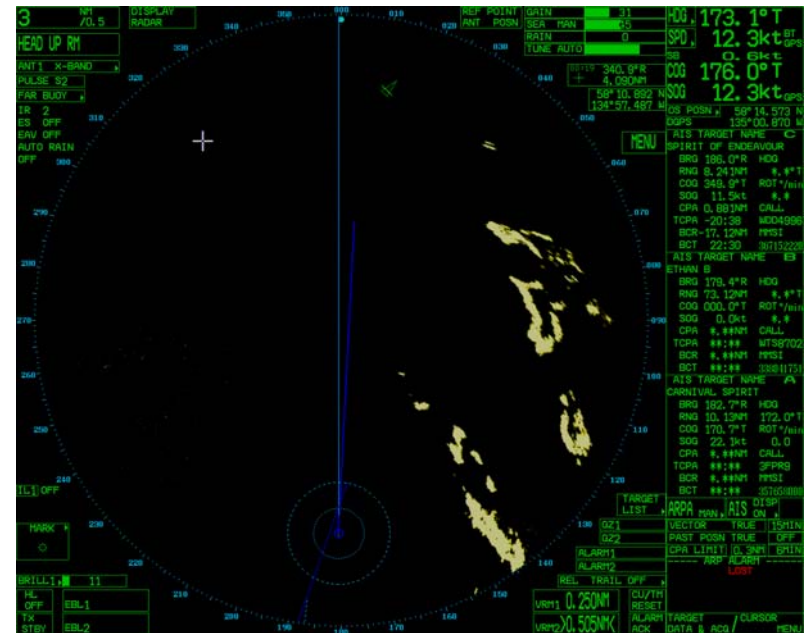
3M-1

yeah.

0108:42

3M-1

we're getting pretty close.



0108:45

AB-1

to our call-in point?

0108:47

3M-1

yeah.

0108:51

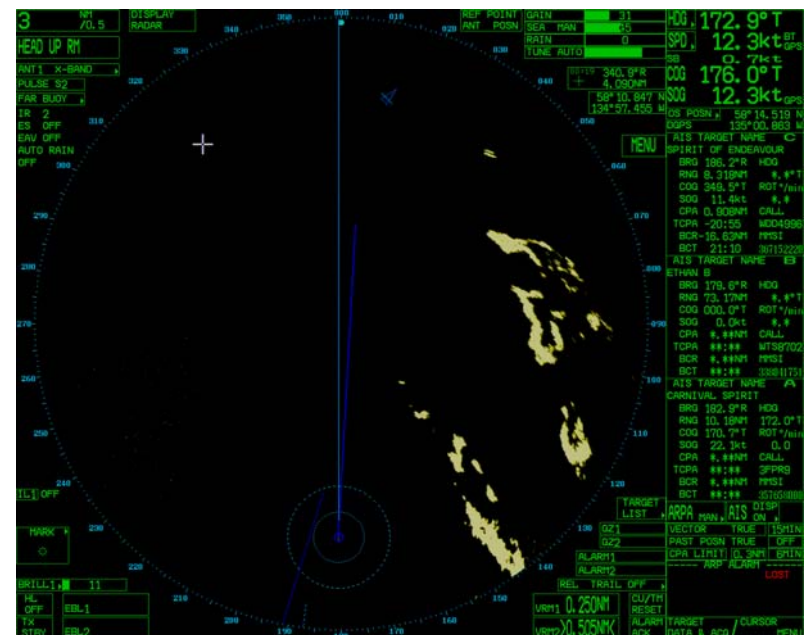
AB-1

Couverdon Rock.

0108:54

3M-1

the call-in point is just below...its right in here.



TIME and
Source

Communication

Radar Imagery

0109:00

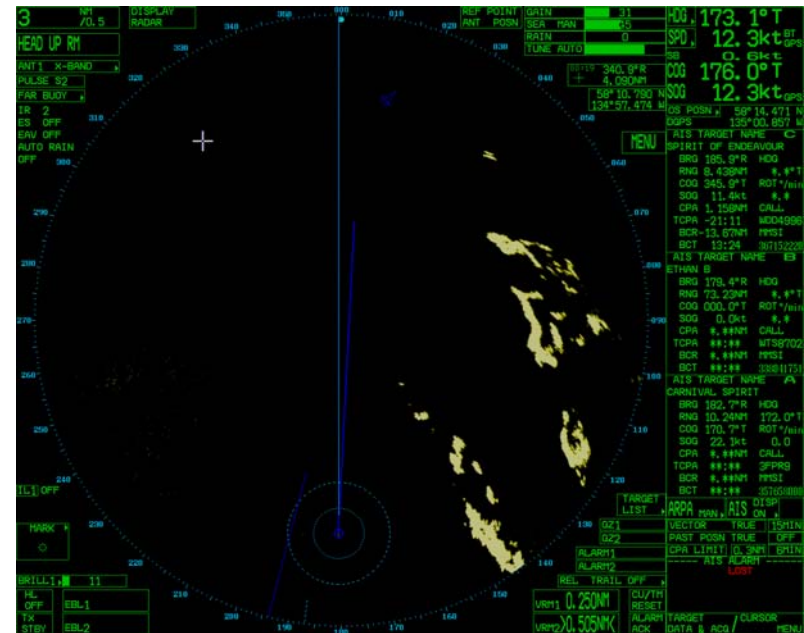
AB-1

okay we'll call in Couverdon Rock.

0109:03

3M-1

all right. yeah that's exactly what that is * rock.



0109:15

AB-1

what's that?

0109:17

3M-1

that's exactly where it is...its at the rock.

0109:20

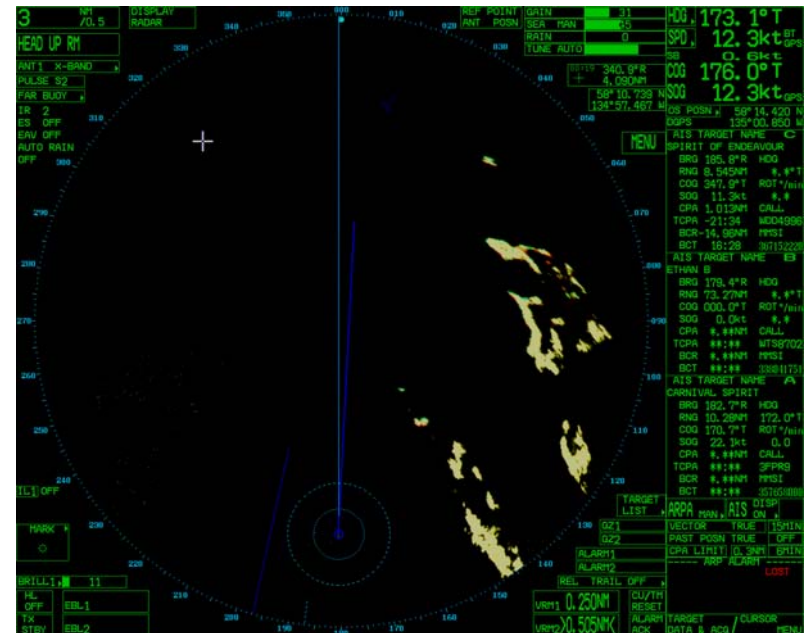
AB-1

yup.

0109:20

3M-1

* lookin' good. and then uh you want to take a look at how you're gonna do this this turn ** be familiar with that.



0109:32
AB-1

0109:33
3M-1

okay.

0109:35
AB-1

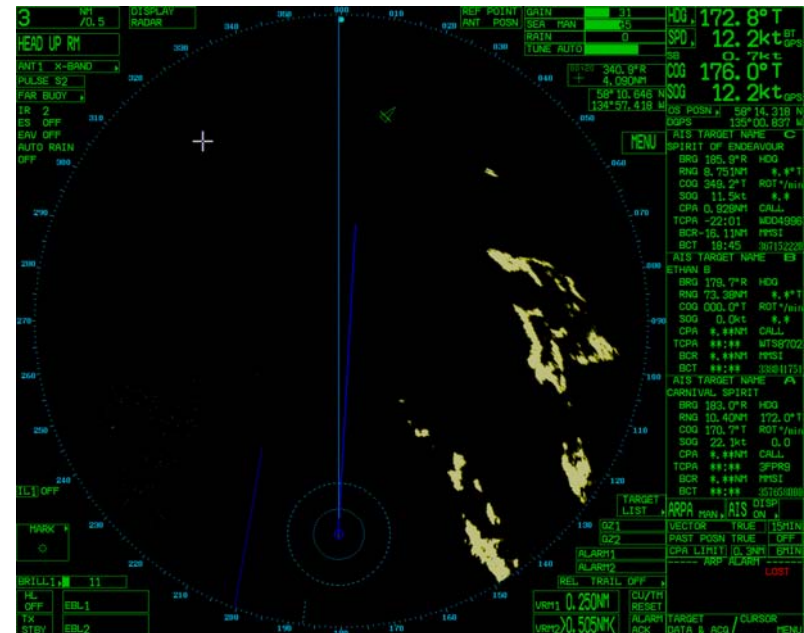
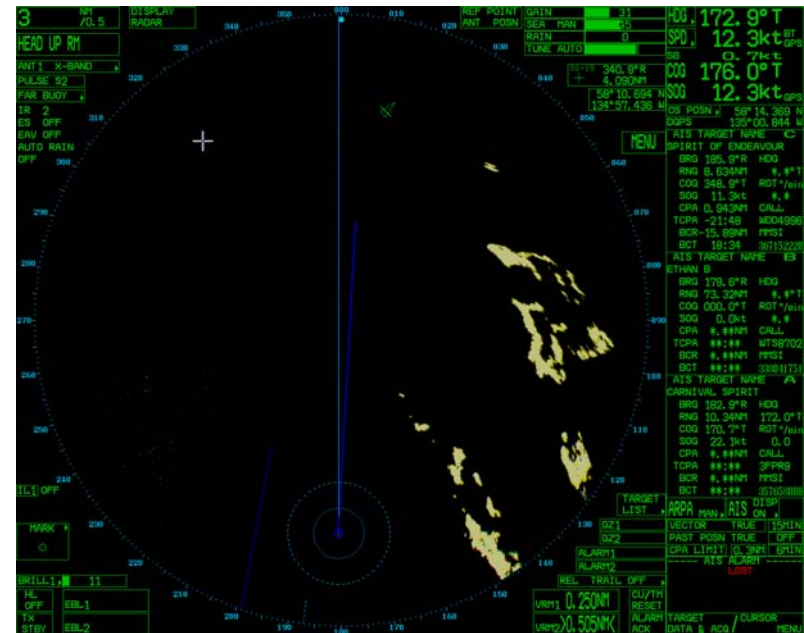
oh yeah we can do it on the autopilot we'll just uh...yeah its pretty pretty straightforward.

0109:45
3M-1

the mate uh showed me a little bit about so that'll be what uh ten degrees per minute and then there was something else *.

Communication

Radar Imagery



TIME and Source

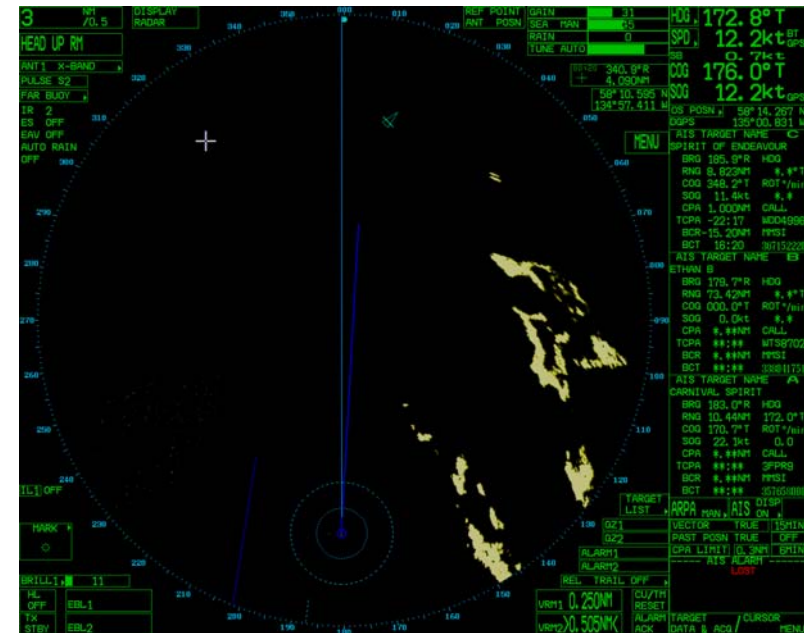
0110:06

AB-1

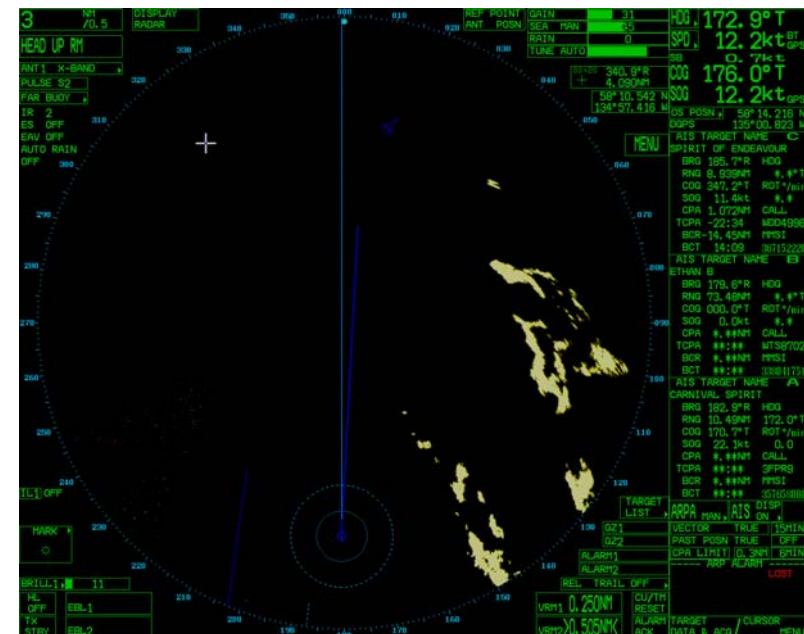
Communication

ten...did * tell you about the rudder limits? ** speed fifteen. you'll get uh whenever you uh start taking your watches you'll set all this stuff up for your whatever you like fifteen ten and ten **.

Radar Imagery



0110:15



TIME and Source

0110:31
3M-1

even even fifteen uh degrees per minute at this speed won't heel over?

0110:33
AB-1

no uh uh actually what we're gonna be doing since we got a nice big turn here is uh I'm gonna work it from ten to twenty so I'll work it up between ten and twenty. um you can actually do that with this uh with this autopilot. so what we'll do is whenever we start our turn we'll go to ten then I'm gonna turn it up to twenty and it'll go over to twenty. twenty will get us to kind snap to a bit more then we'll back it back to ten uh and we'll back down.

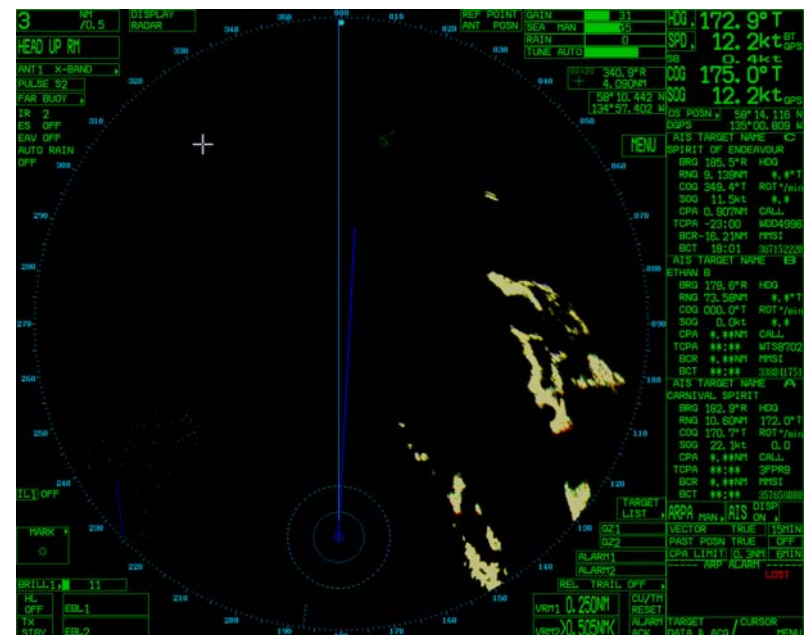
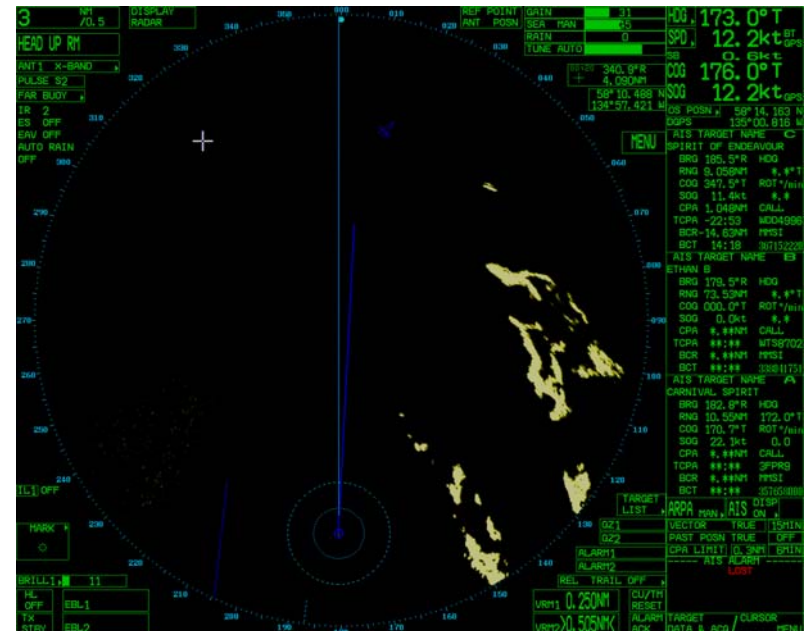
0110:33
3M-1

yeah...okay...all right...okay.

0110:45

Communication

Radar Imagery



0111:02
AB-1

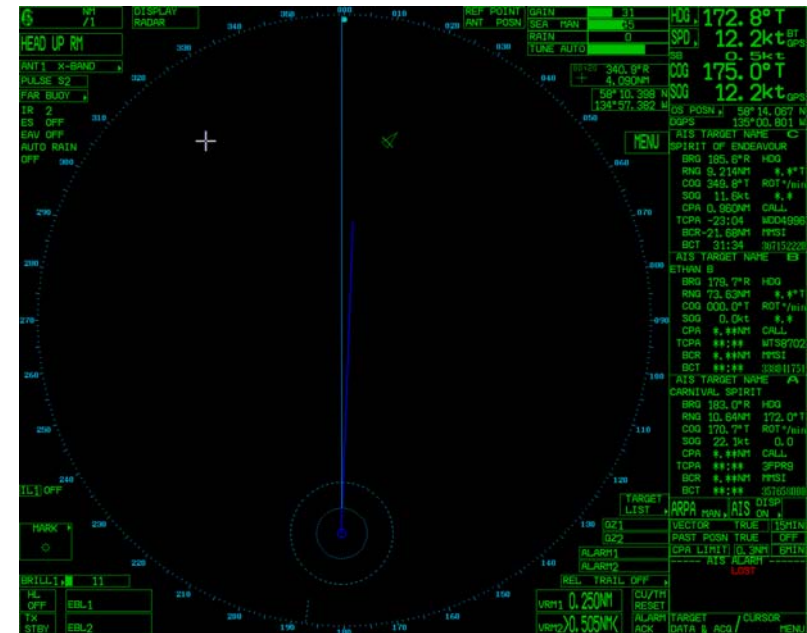
so um— yeah you can uh you can take a pretty nice turn in this thing before you really start uh throwing dishes around. it depends on your speed really. there's gonna be places where we're gonna be you know thirty degrees. some big turns.

0111:02
3M-1

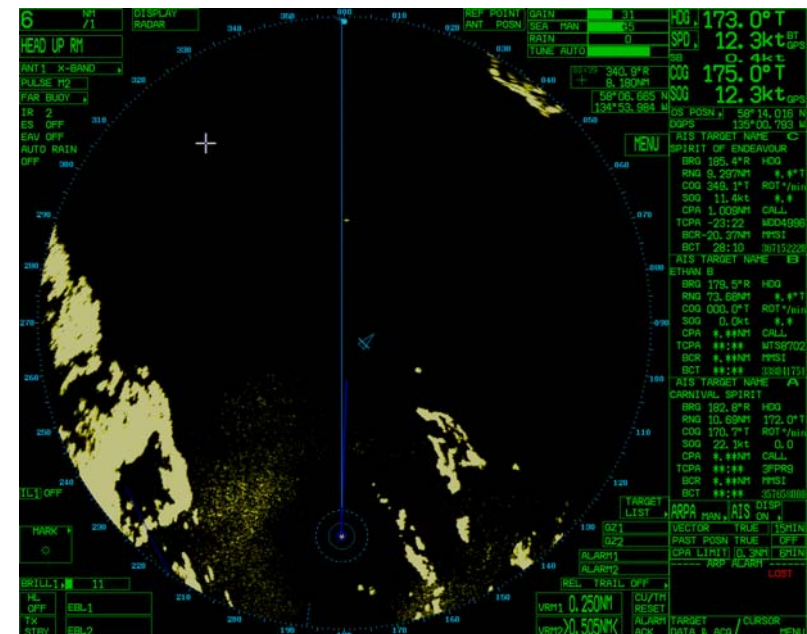
all right...yeah yeah.

Communication

Radar Imagery



0111:15



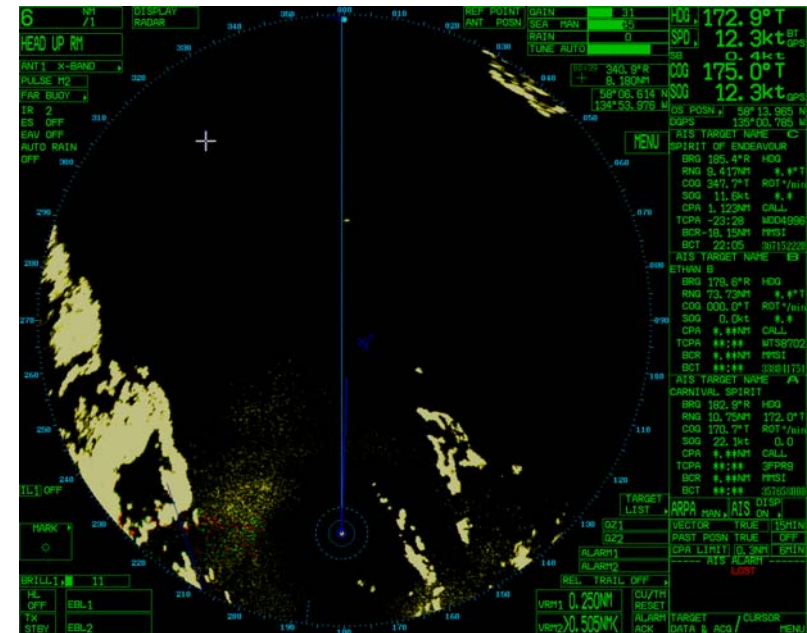
TIME and
Source

0111:40
3M-1

Communication

yeah this is not too uh not too narrow here. **.

Radar Imagery

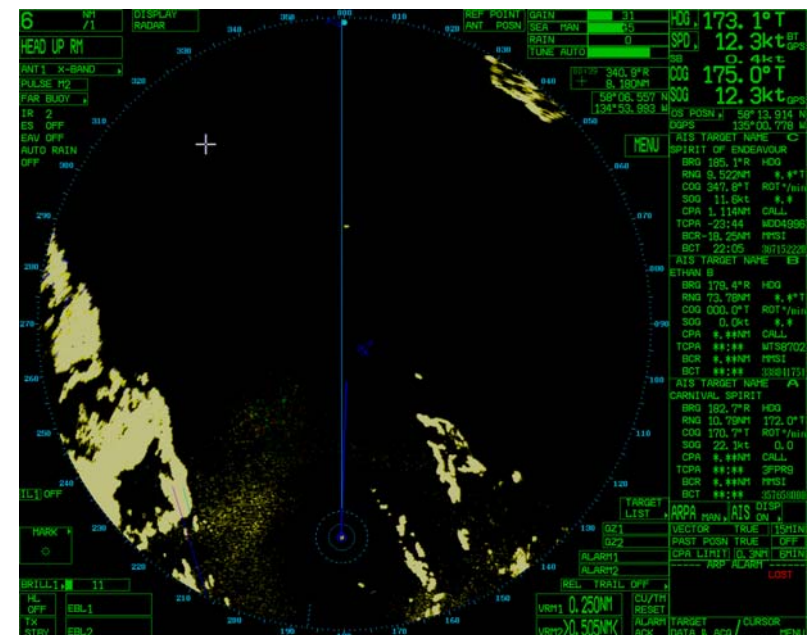


0111:45
AB-1

no we gotta— this is a good place to just kind of try and get used to everything. it really is. I'd tell you more about the autopilot but you know honestly the mates all have their own little thing on that and I think its best that you get up uh with @ and uh you know work with him a little bit and um go through that. he's got his own way of doing that and you're gonna be with him for a while on this and—. he also he knows the river real well so you know and you'll be able to get some really good information from him.

0111:45
3M-1

uh huh...all right...yeah.

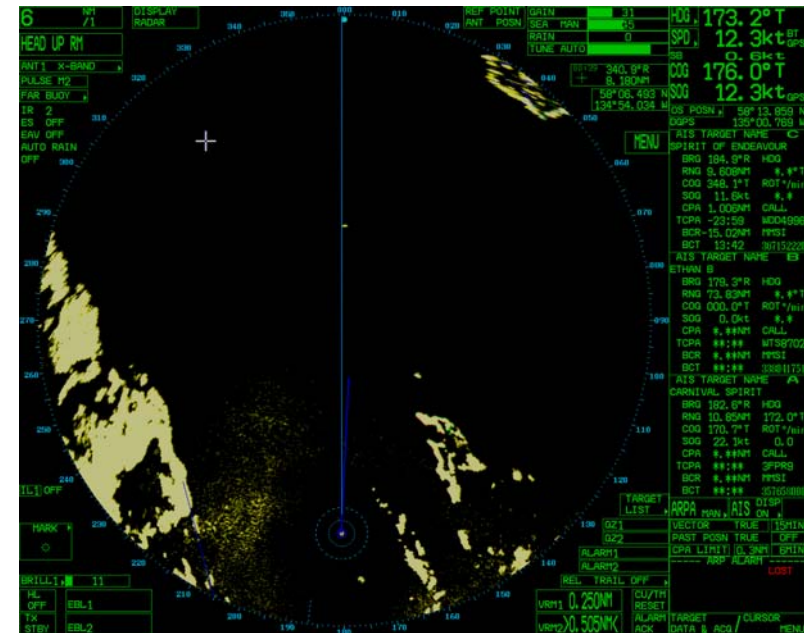


TIME and
Source

0112:00

Communication

Radar Imagery

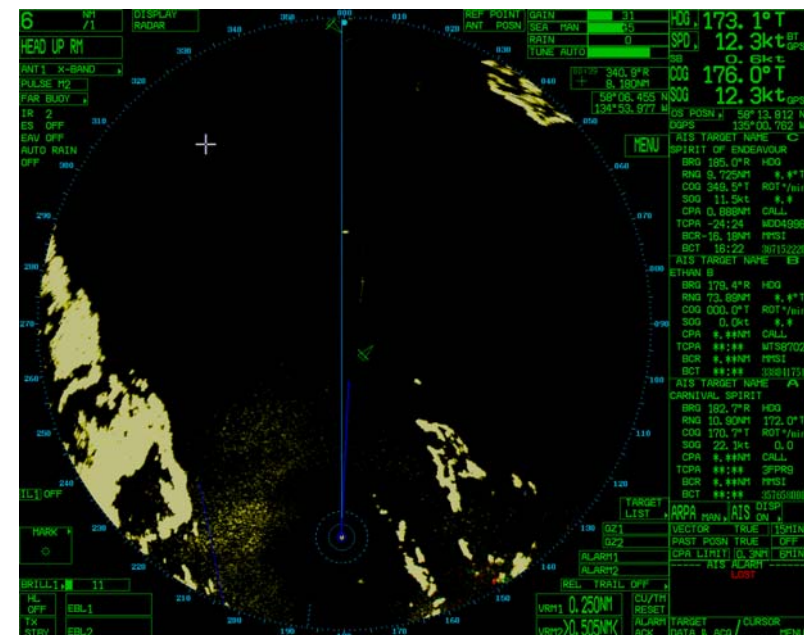


0112:20
AB-1

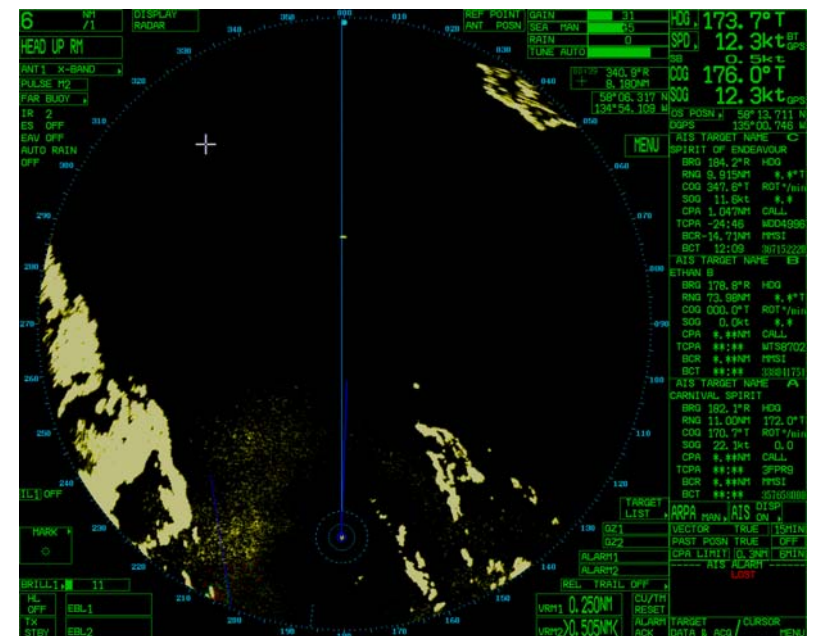
and then uh working with @ he's got his own thing with it too so you can just kind of glean information from him and then work your own you know. 'cause whenever I'm on the whenever I take my wheel watch you know I just have to work with whatever the mate has set in there. so I—I don't want to set it up myself. I kind of feel like that's overstepping my bounds a little you know what I mean?

0112:20
3M-1-1

yeah...yeah...okay...yeah yeah.



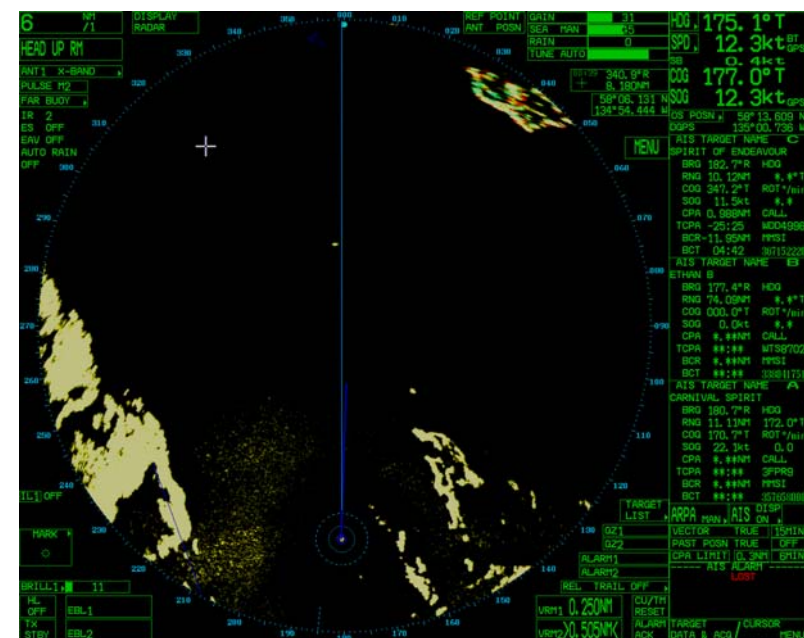
0112:30



VDR Factual Report

Page 51

0113:00

VDR Factual Report
Page 52

0113:34
?

0113:47
3M-1

yeah this thing is great.

0113:48
AB-1

idn't it? you love it huh. how can you get lost with that.

0113:51
3M-1

oh man.

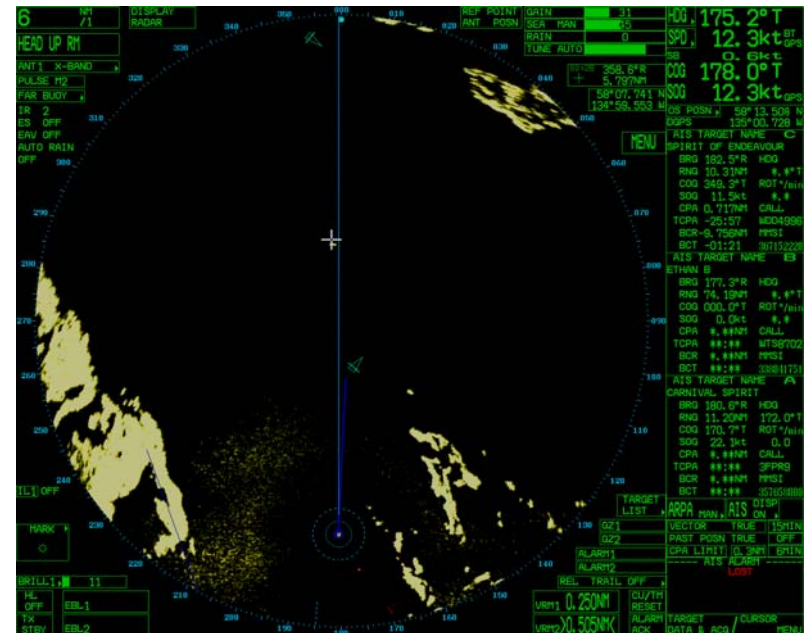
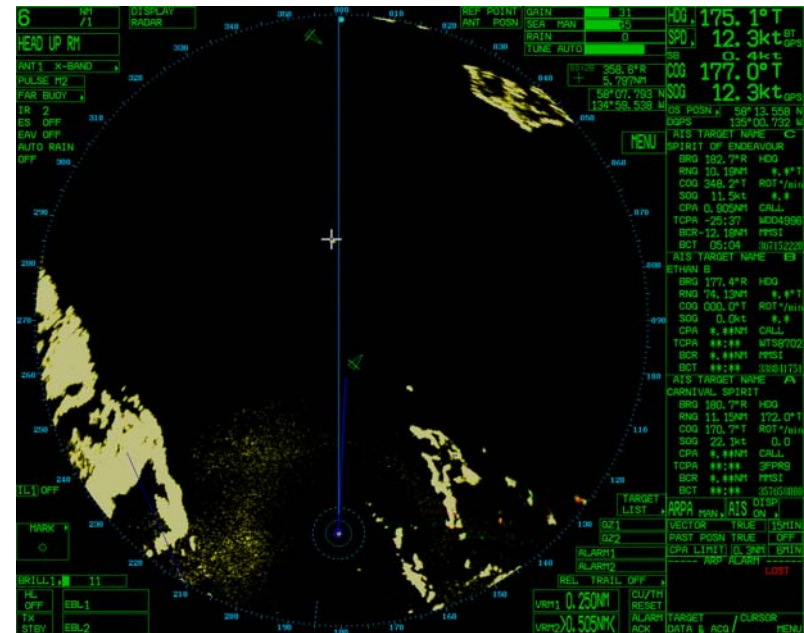
0113:58
AB-1

some people still manage man you know its amazing.

0113:59
3M-1

yeah.

Radar Imagery



TIME and Source

0114:05

AB-1

I can understand blowing an ETA or something like that but getting lost.

0114:06

3M-1

yeah *.

0114:13

AB-1

we had a well not on this boat but I worked with a mate a few years ago that he got lost on his way up to Canada there. and uh you know what I—I—I think maybe he just didn't know how to set up a a route on the electronic chart display and he didn't know—. he didn't have track lines on the charts like you're supposed to do man. yeah I don't know how he got so far out there but he ended up just doing circles until the next watch came on. he didn't even call the captain and say hey I'm lost. and then he ended up getting terminated over that.

0114:13

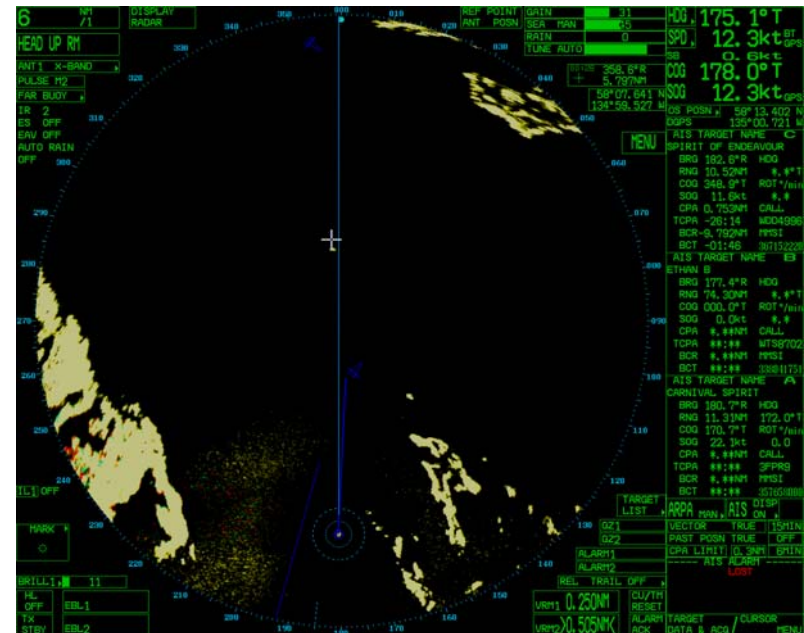
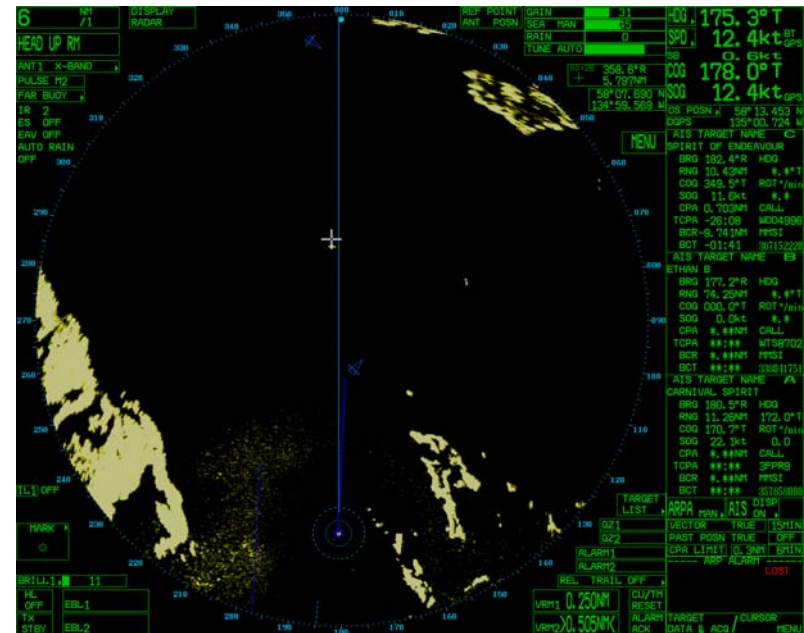
3M-1

yeah...yeah you put em there...oh yeah yeah *.

0114:15

Communication

Radar Imagery

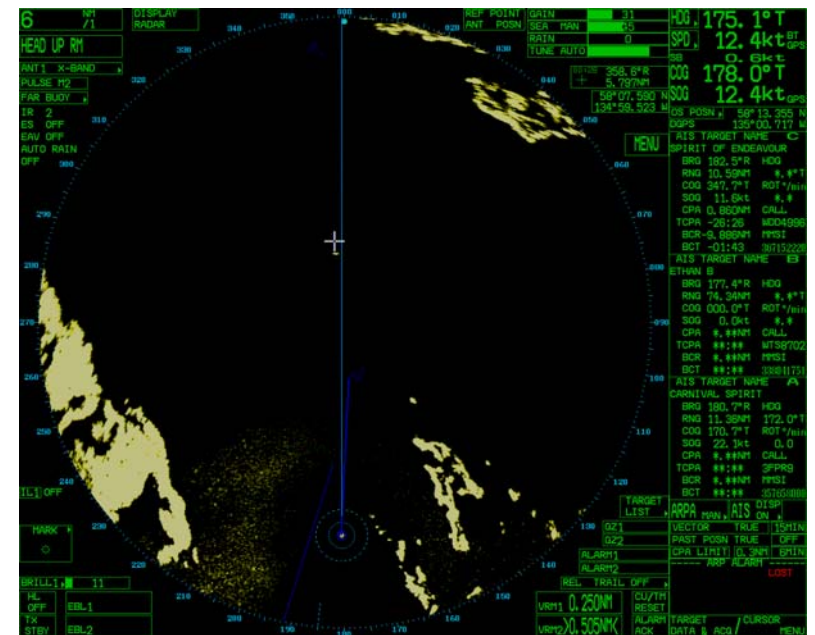


TIME and
Source

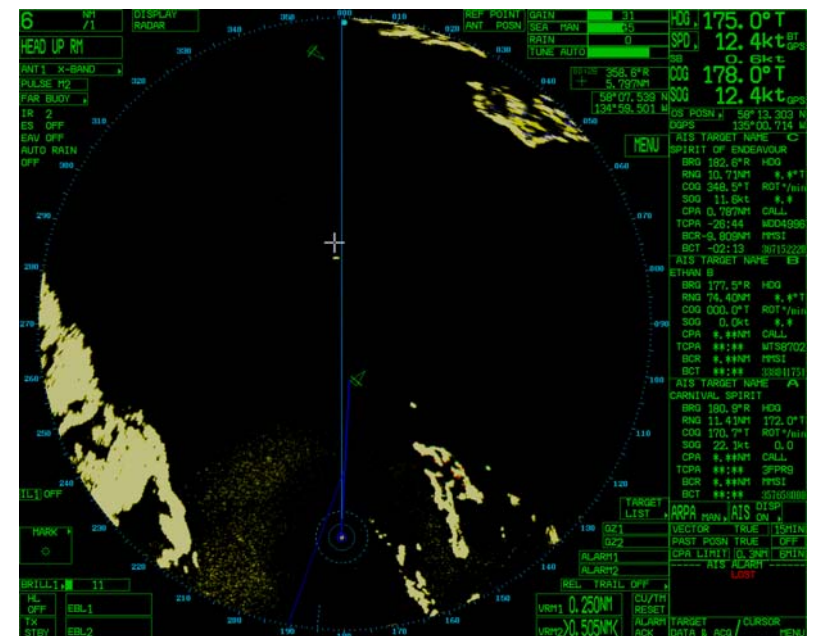
0114:30

Communication

Radar Imagery



0114:45



TIME and
Source

Communication

Radar Imagery

0115:00

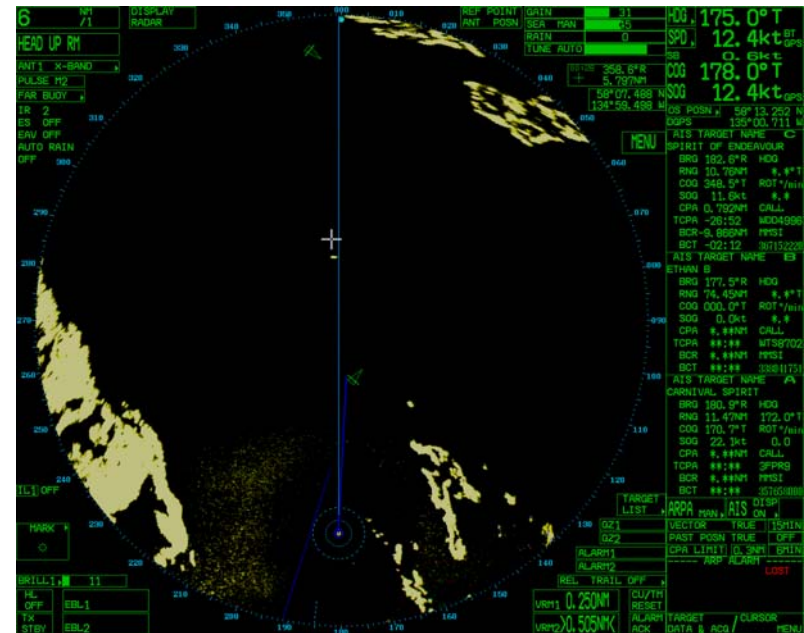
AB-1

yeah it was nuts.

0115:10

VHF

[sound of securité call from Spirit of Discovery]



0115:24

AB-1

*

0115:28

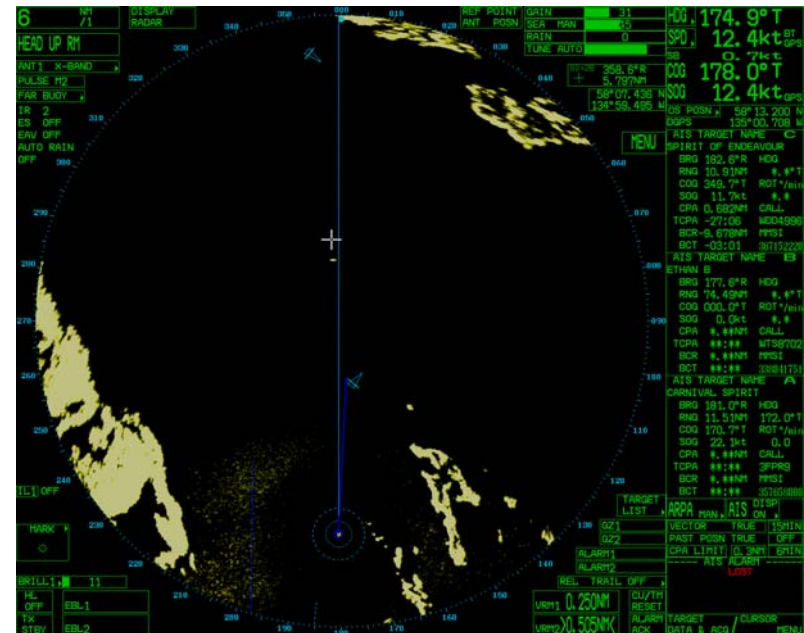
3M-1

are they heading out?

0115:28

AB-1

yeah I guess yeah.



0115:33
3M-1

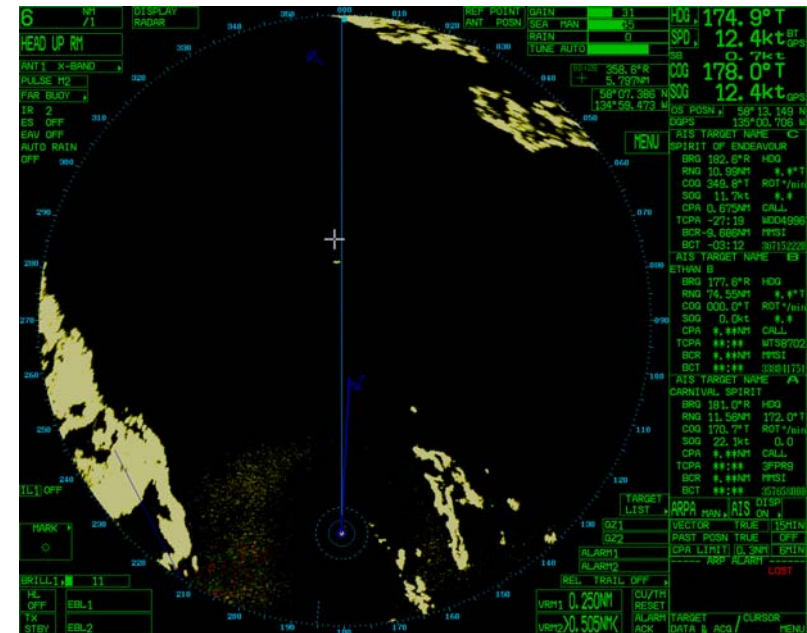
so on this ECDIS what's the deal with that track line? is it just a different one?

Communication

0115:38
AB-1

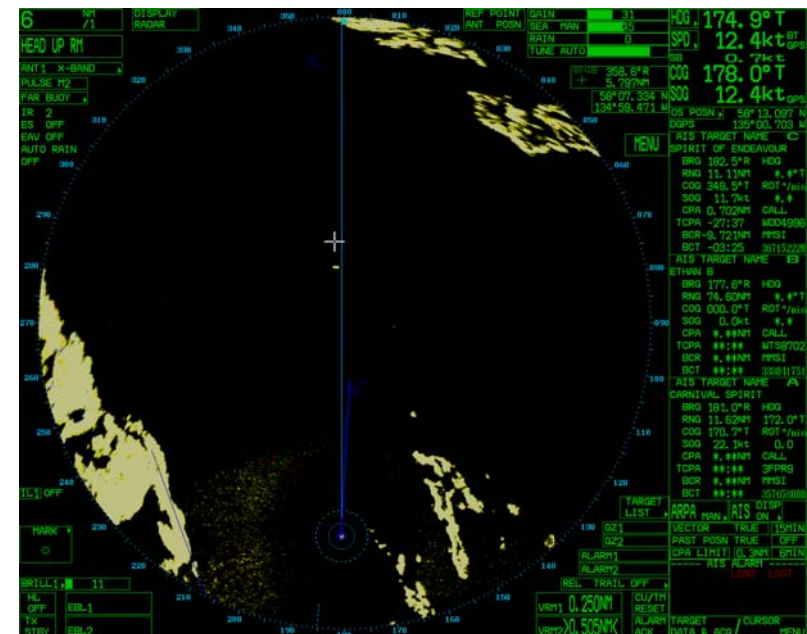
uh yeah its just a different * track line. we're gonna be taking this one right here two seven zero if I remember from the chart right. ** yeah that ECDIS has got it set up I think that one is heading in to um...that's a route that's supposed to take you back a different um a different way.

Radar Imagery



0115:59
3M-1

why does the chart say do not mark?



TIME and
Source

0116:02
AB-1

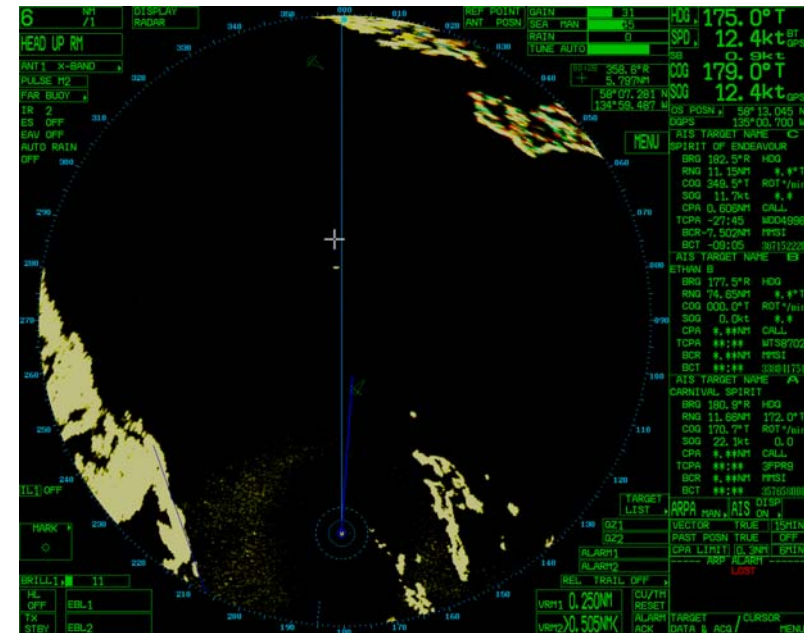
oh does it?

0116:07
3M-1

two nine one. * two nine one all the way through Icy Strait.

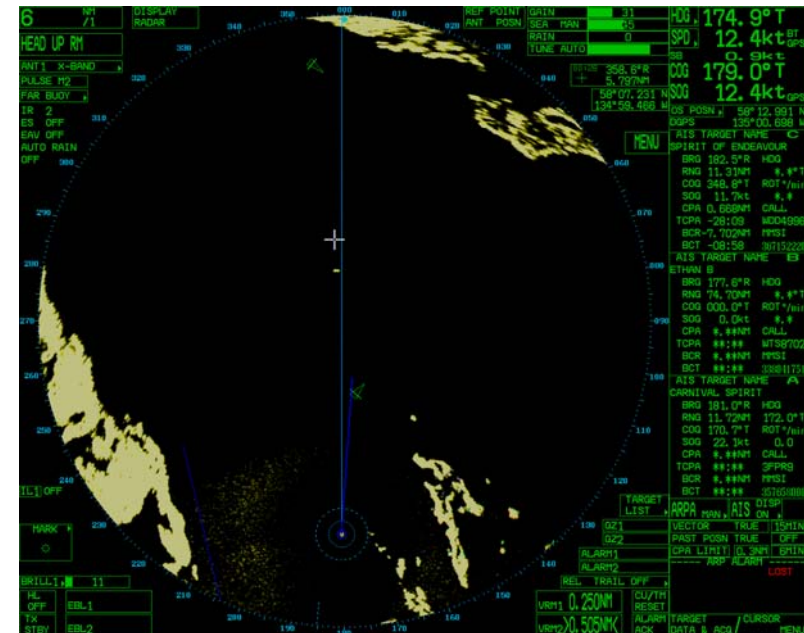
Communication

Radar Imagery



0116:20
AB-1

oh really? well look at the— look at the route all the way to uh uh Glacier Bay.



0116:33
3M-1

0116:33
AB-1

on this chart?

0116:35
AB-1

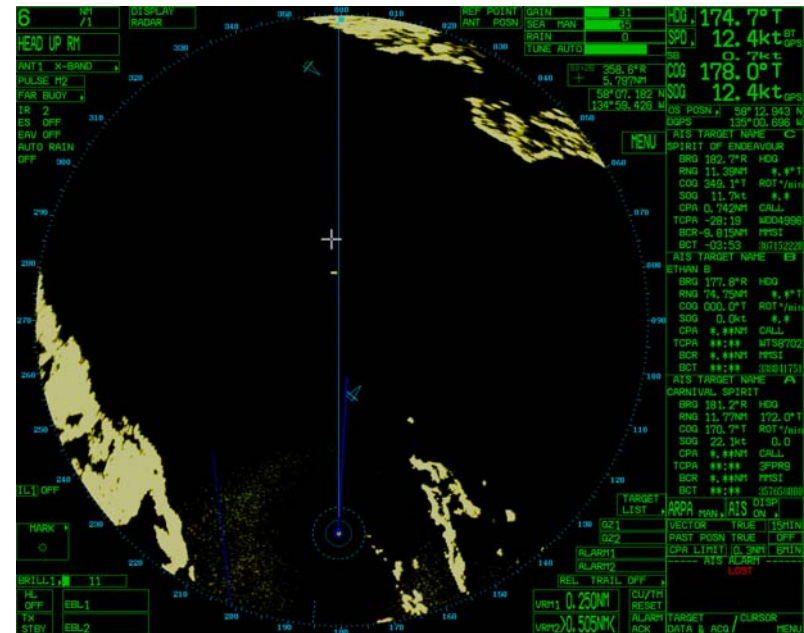
track line should draw on the track line is it two nine one?

0116:40
3M-1

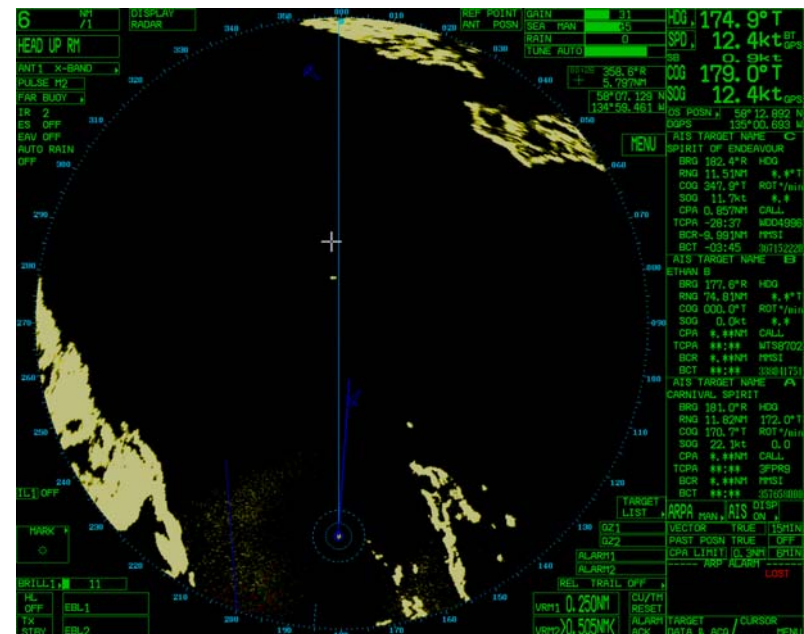
yeah. same thing.

Communication

Radar Imagery



0116:45



TIME and
Source

Communication

Radar Imagery

0117:05

VHF

[sound of VHF radio traffic]

0117:06

[sound similar to charts folding]

0117:07

?

**

0117:10

AB-1

we'll make our call.

0117:10

3M-1

we'll make our call and then can you give me uh a range and bearing to let's say Couverdon Rock.

0117:20

AB-1

Couverdon?

0117:21

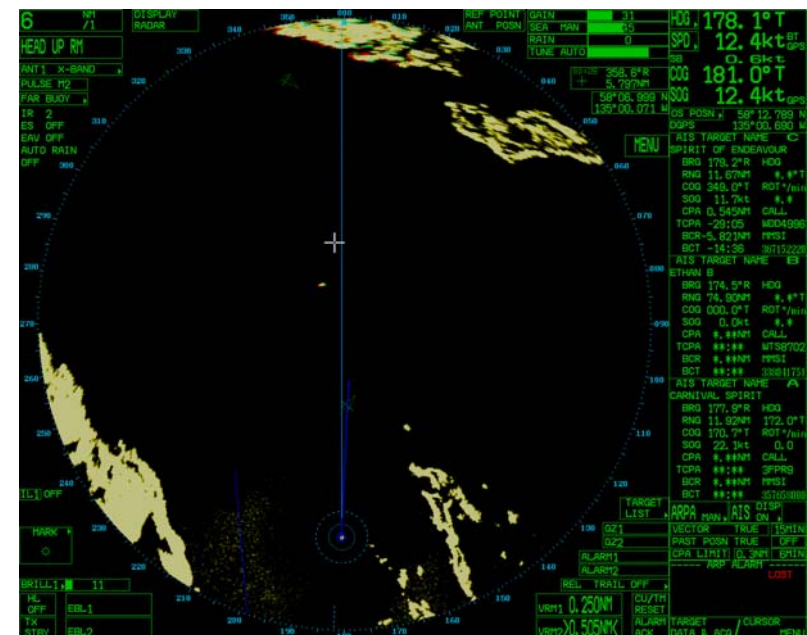
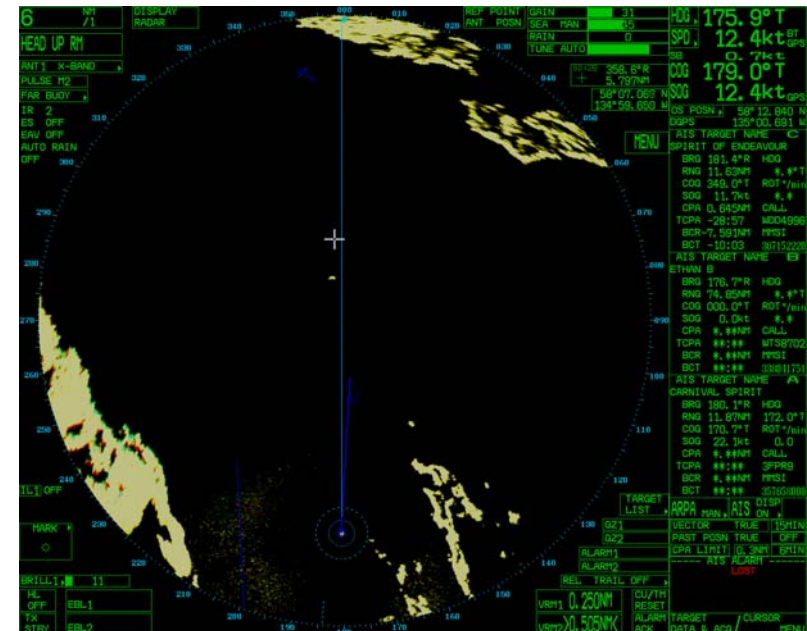
3M-1

yeah.

0117:24

AB-1

yeah.



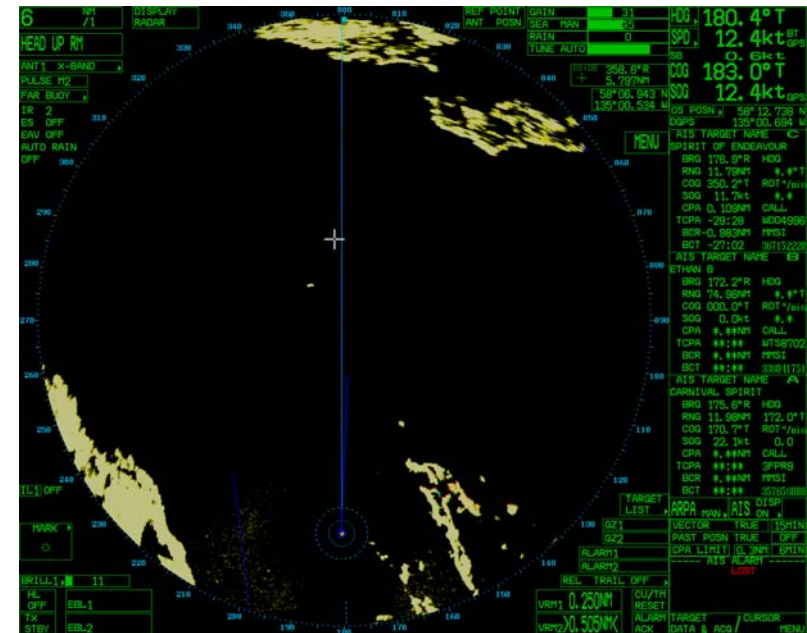
TIME and Source

0117:37
VHF-AB-1

Communication

securité securité securité this is small passenger vessel Empress of the North at Couverdon Rock bound for Glacier Bay Empress of the North.

Radar Imagery

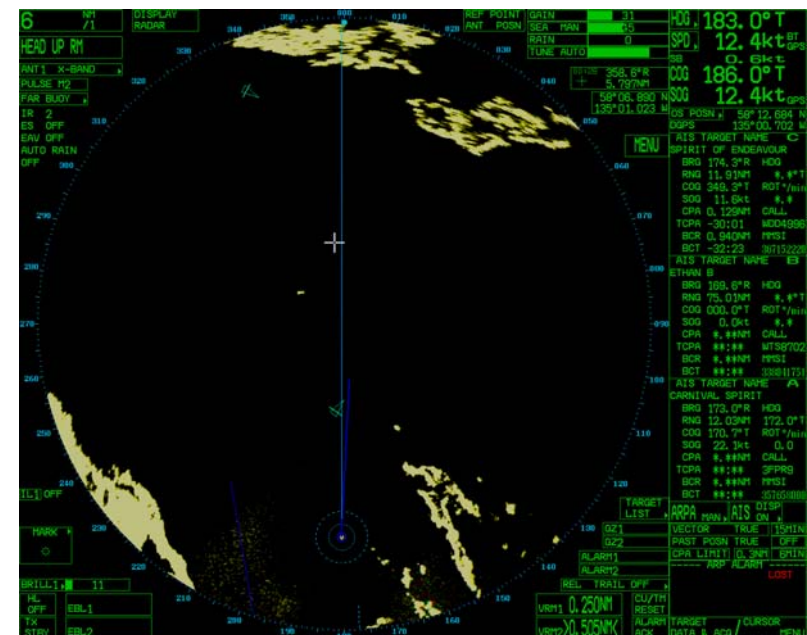


0117:49
3M-1

so that's it right there right?

0117:56
VHF-AB-1

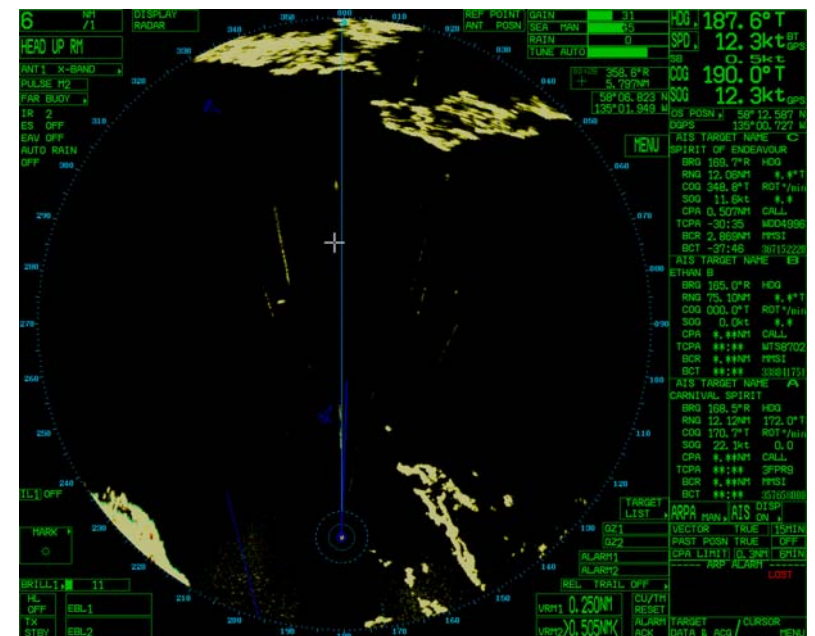
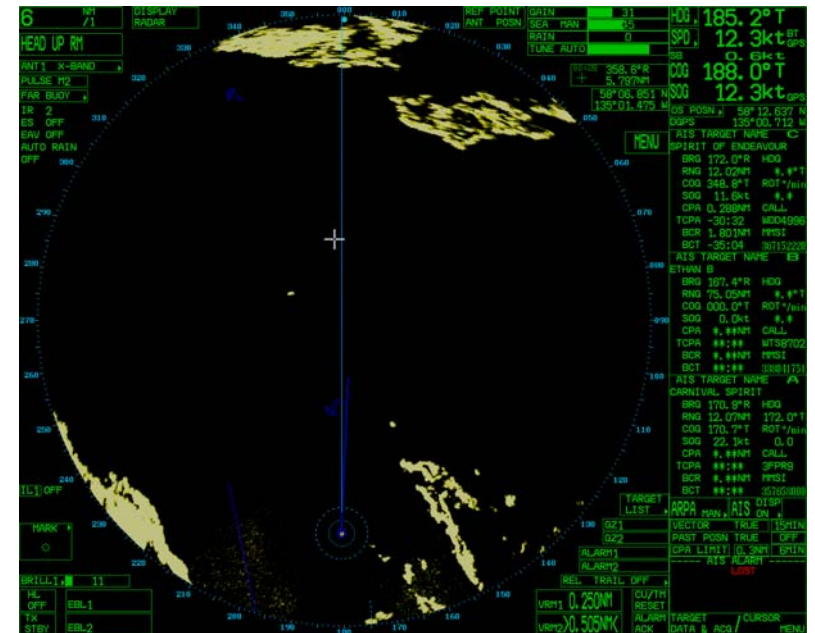
securité securité securité this is small passenger vessel Empress of the North at Couverdon Rock bound for Glacier Bay. any concerned traffic please respond on one six one three.



0118:08
3M-1

0118:15

Radar Imagery



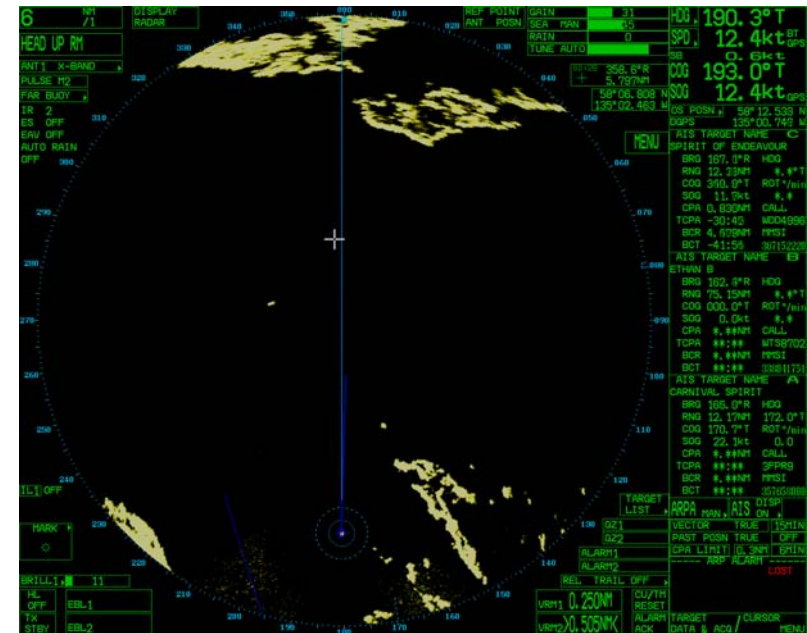
TIME and
Source

Communication

Radar Imagery

0118:31
VHF-ES

calling that northwest bound vessel in Icy Strait uh coming up on the Sisters the Evening Star on sixteen.

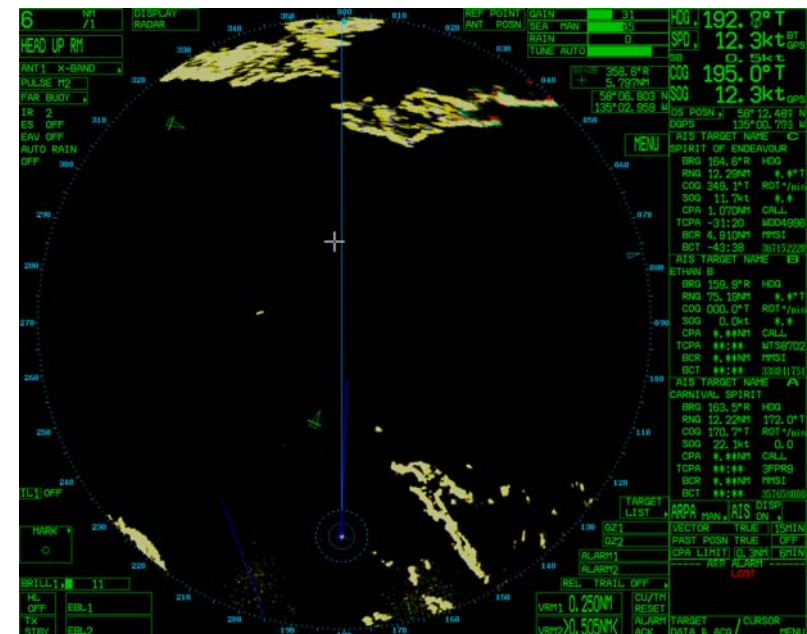


0118:47
AB-1

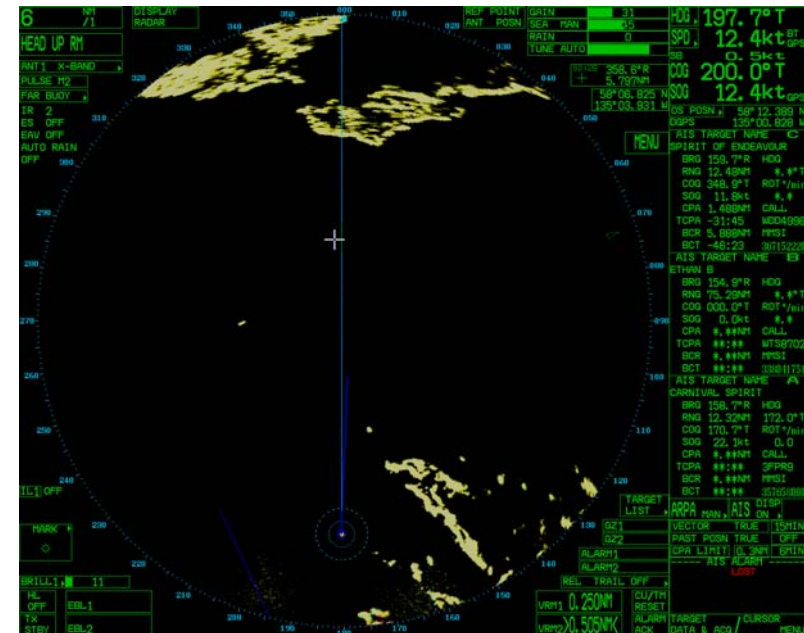
how far are we from the Sisters?

0118:50
3M-1

we're about...we're about eight miles ** track line ** ... we're about eleven miles from * Island on our on our track line if we stay on the track line we're eleven miles.



01 19:00



TIME and Source

Communication

Radar Imagery

0119:32

AB-1

okay. so did we determine if this was going to be our next course line here of two seven zero?

0119:39

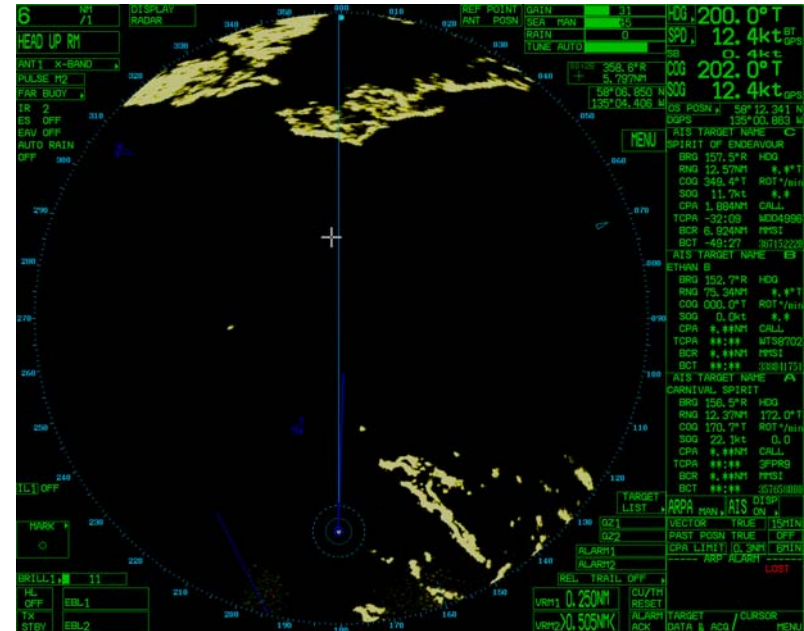
3M-1

well on the chart see take a look.

0119:43

AB-1

oh I got you oh no no I understand we're gonna—.



0119:45

VHF-ES

calling northwest bound vessel in Icy Straits uh approaching the Sisters this is the Evening Star on thirteen.

0119:53

AB-1

we're southbound.

0119:54

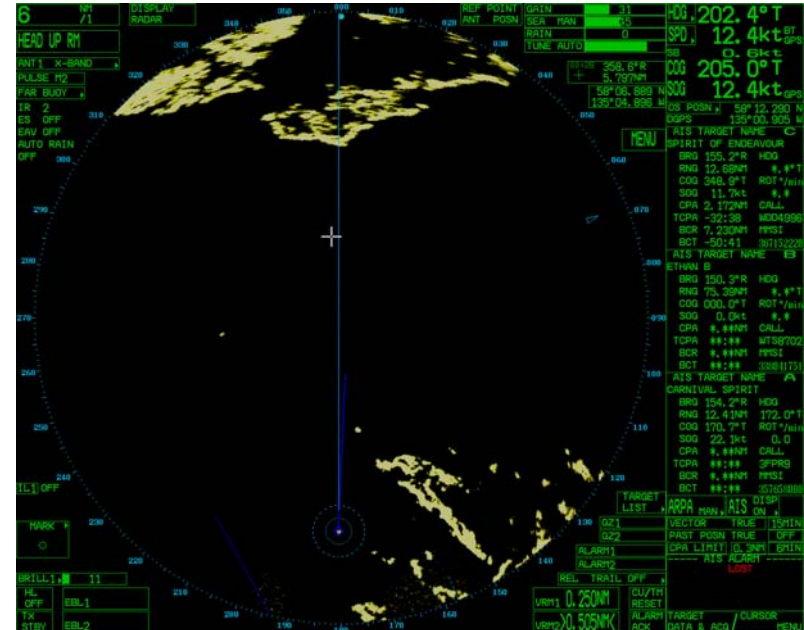
3M-1

yeah.

0119:57

AB-1

yeah so we're uh Icy okay we're gonna do two seven zero just for a short amount time then we're gonna come around two ninety.



TIME and
Source

Communication

Radar Imagery

0120:04
3M-1

okay. yeah all right.

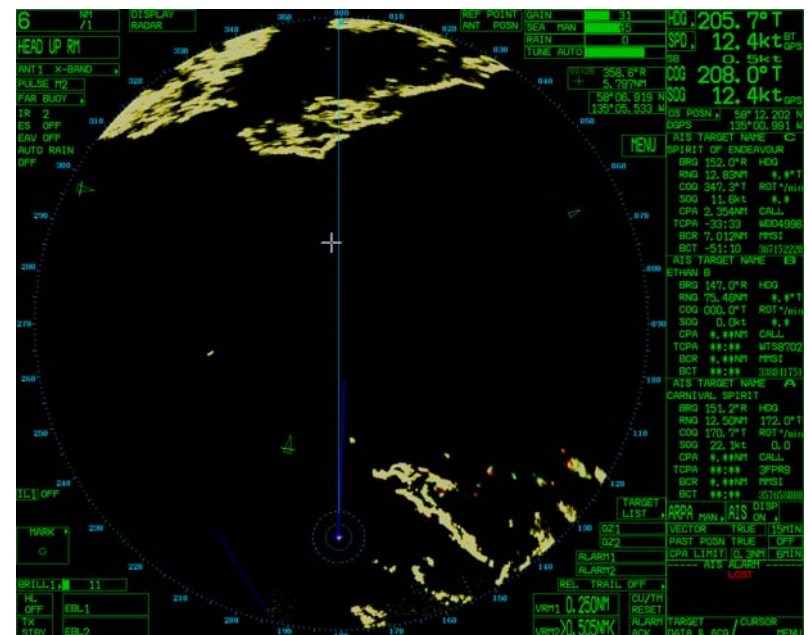
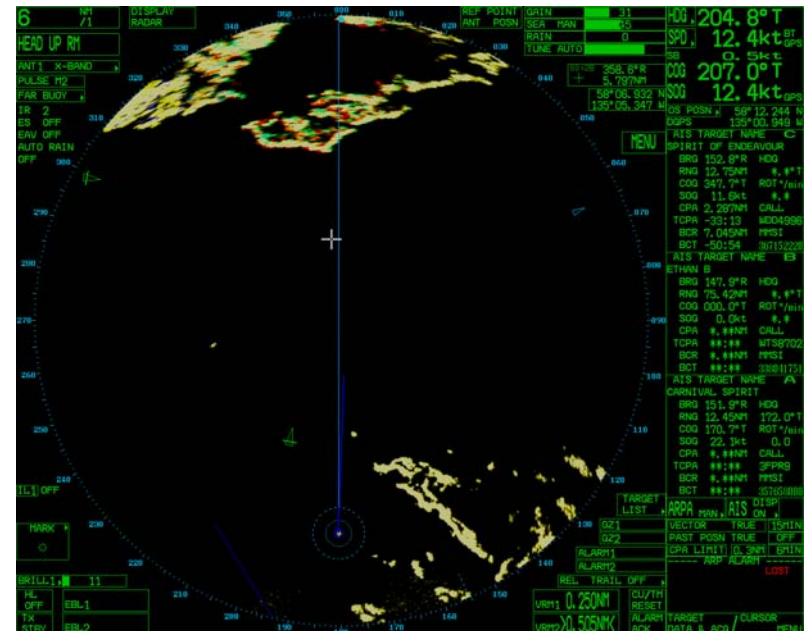
0120:07
AB-1

we're all on the same sheet of music now. you wanna check it out on the electronic chart?

0120:13
3M-1

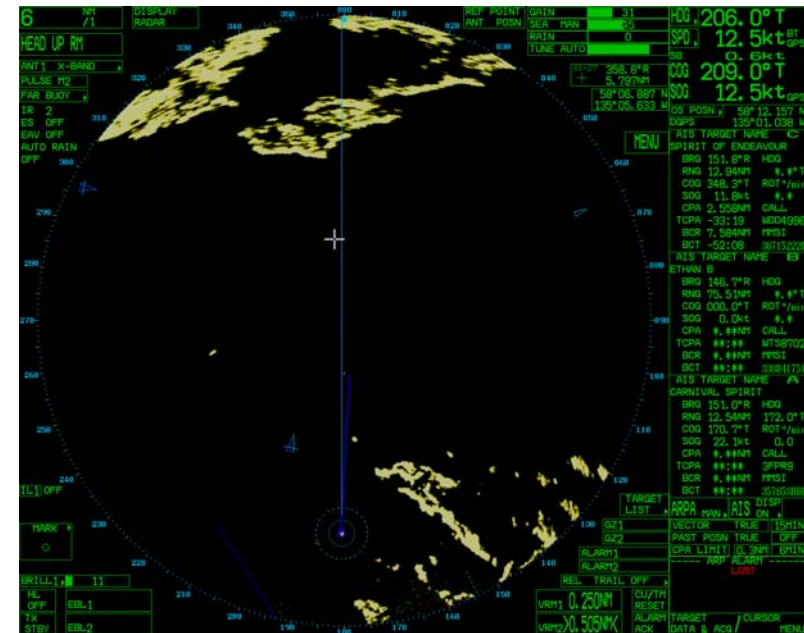
yeah I'll be right there.

0120:15



0120:30

Radar Imagery



0120:45

3M-1

all right *. yeah see there you just to round it out a little bit more.

0120:58

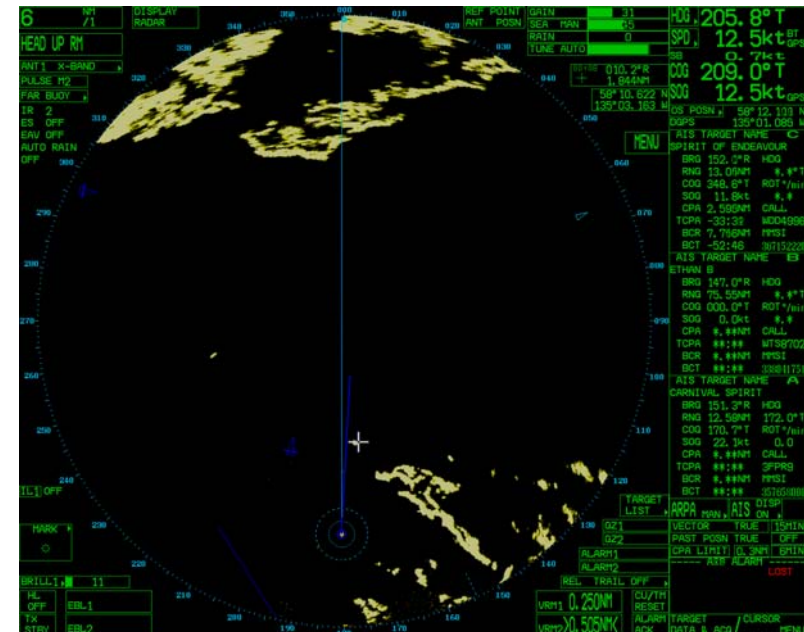
AB-1

yeah.

0120:59

3M-1

all right.



TIME and
Source

Communication

Radar Imagery

0121:02
AB-1 makes sense to me.

0121:04
3M-1 yeah it does.

0121:06
AB-1 I like that better.

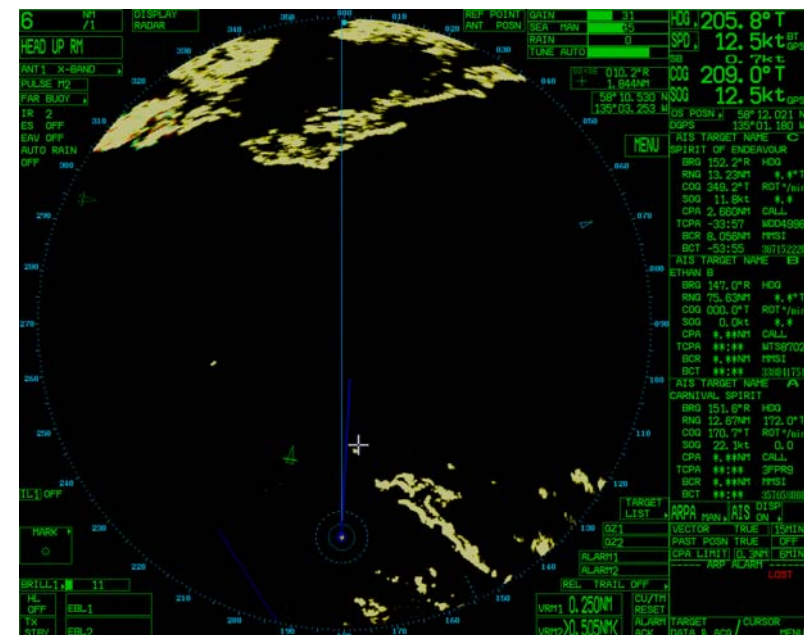
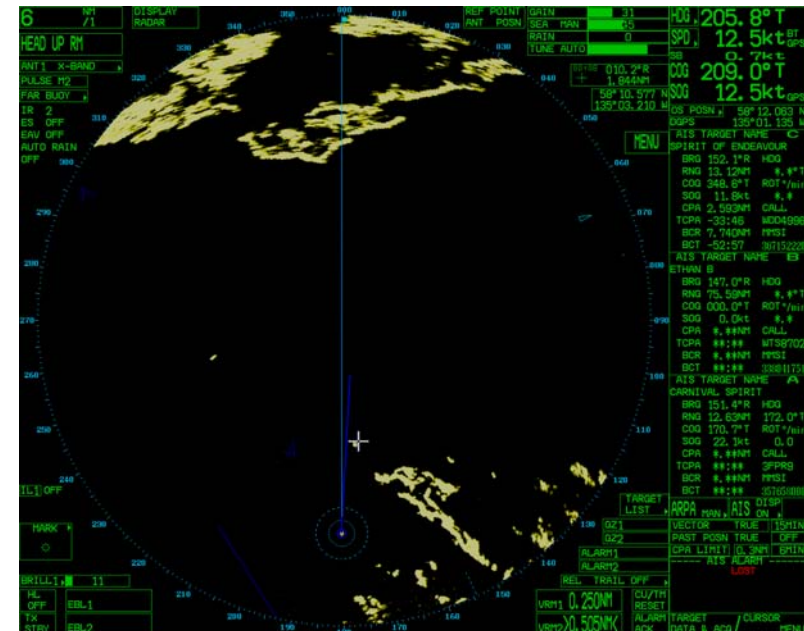
0121:10
3M-1 no problem we're good.

0121:10
AB-1 yeah comin' all the way around two eight you know to uh what was it two nine one?

0121:15
3M-1 yeah.

0121:16
? **

0121:21
3M-1 yeah that be uh...yeah that'll be the that would be * to the middle a little bit more.



0121:30
3M-1

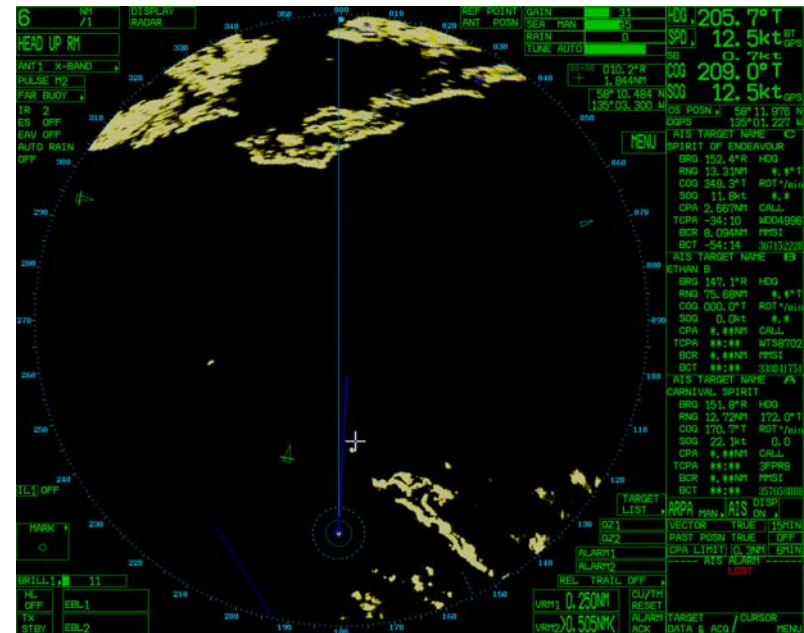
0121:31
AB-1

Communication

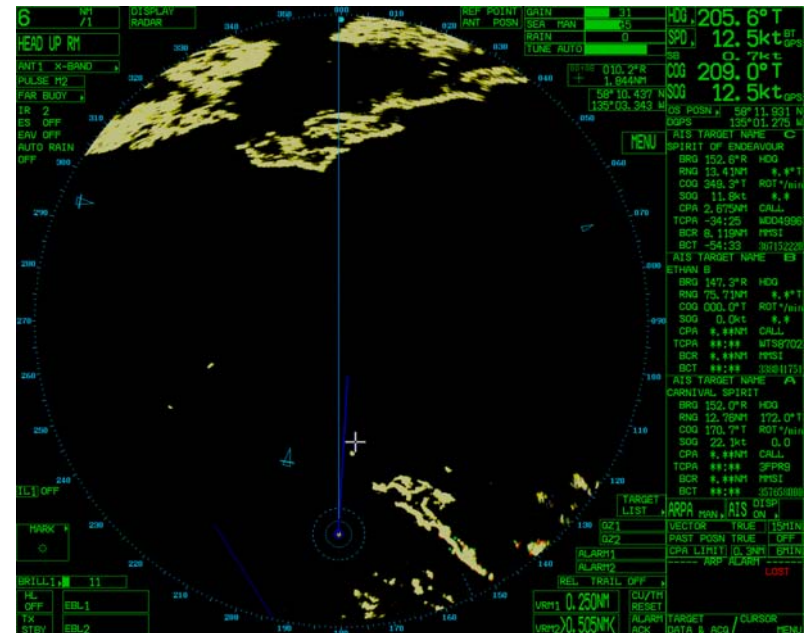
two seven zero for a little while.

yeah.

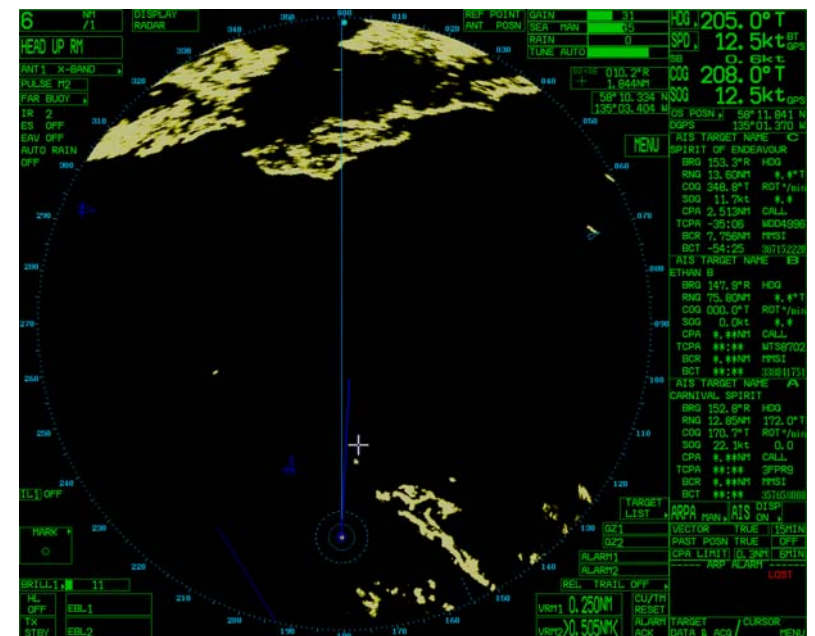
Radar Imagery



0121:45



0122:00

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TIME and
Source

Communication

Radar Imagery

0122:37
?

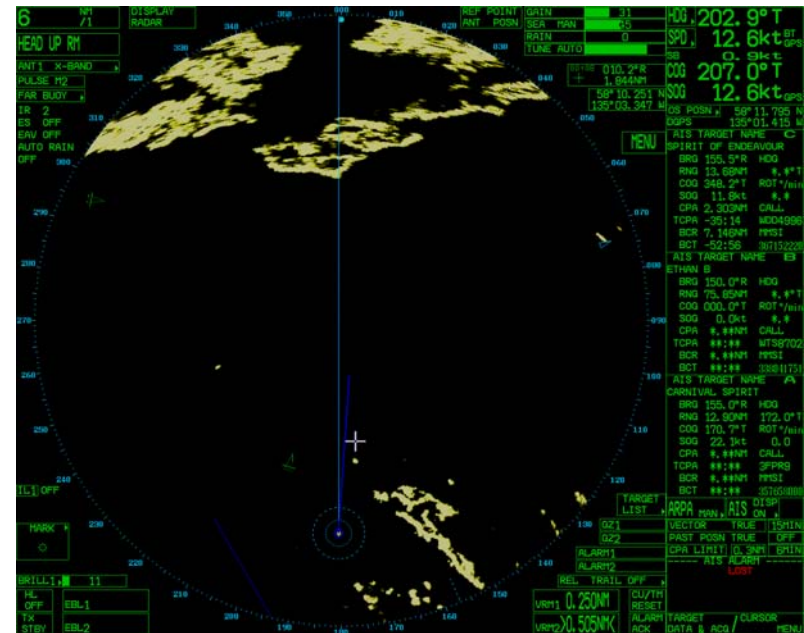
[sound similar to humming]

0122:40
3M-1

I love this song.

0122:41
AB-1

yeah its nice idn't it?



0122:54
3M-1

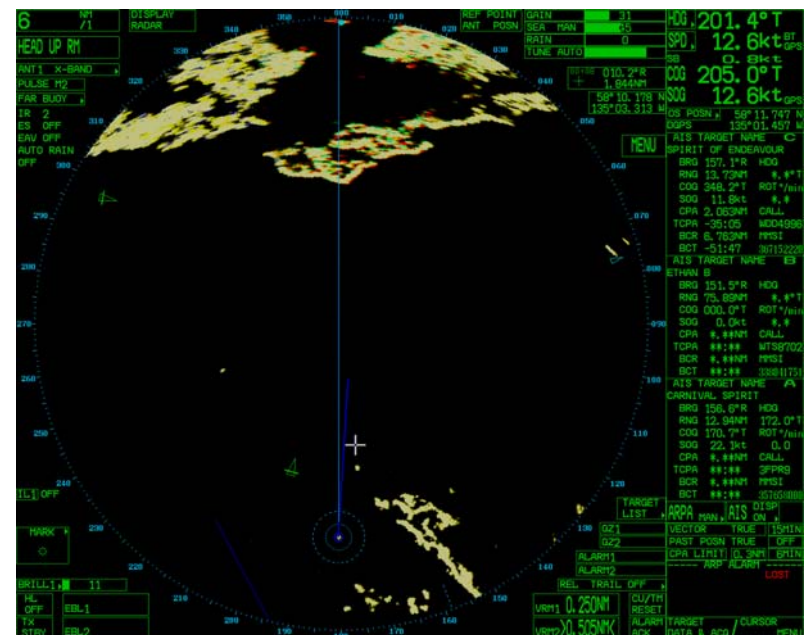
so they were calling a...

0122:55
AB-1

a northbound vessel in Icy Strait.

0122:56
3M-1

okay.



TIME and
Source

Communication

Radar Imagery

0123:02

3M-1

that's in an area that we're heading right?

0123:03

AB-1

yup.

0123:09

3M-1

what is this on our starboard side?

0123:14

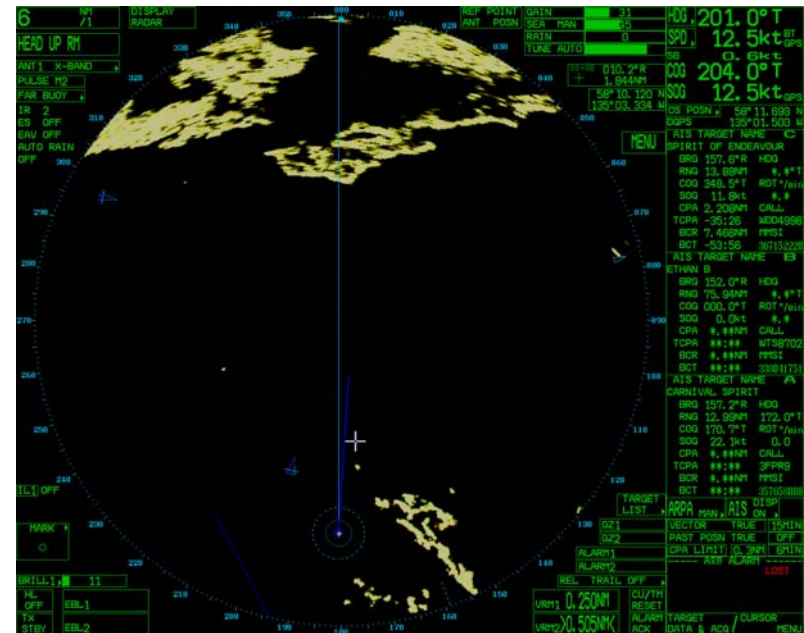
AB-1

that's Point Couverdon.

0123:14

3M-1

that's the point?



0123:15

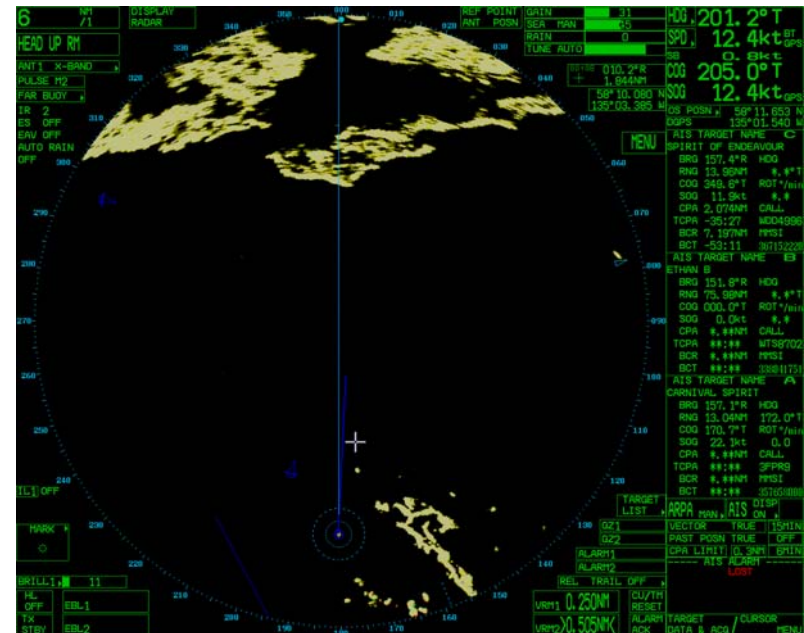
AB-1

yeah we should be uh...actually I think what you got out there is a uh Norwegian maybe a Norwegian sun.

0123:29

3M-1

Norwegian sun?



TIME and
Source

Communication

Radar Imagery

0123:32

AB-1

yeah a really really bright bright crab light.

0123:37

3M-1

is that uh is that a a vessel?

0123:39

AB-1

oh yeah.

0123:43

3M-1

is it a—. there's uh there's a vessel right to the right of the triangle.

0123:51

AB-1

yup.

0123:53

3M-1

so is— so is that bright light ahead an actual vessel?

0123:54

AB-1

yeah it's a fishing boat.

0123:56

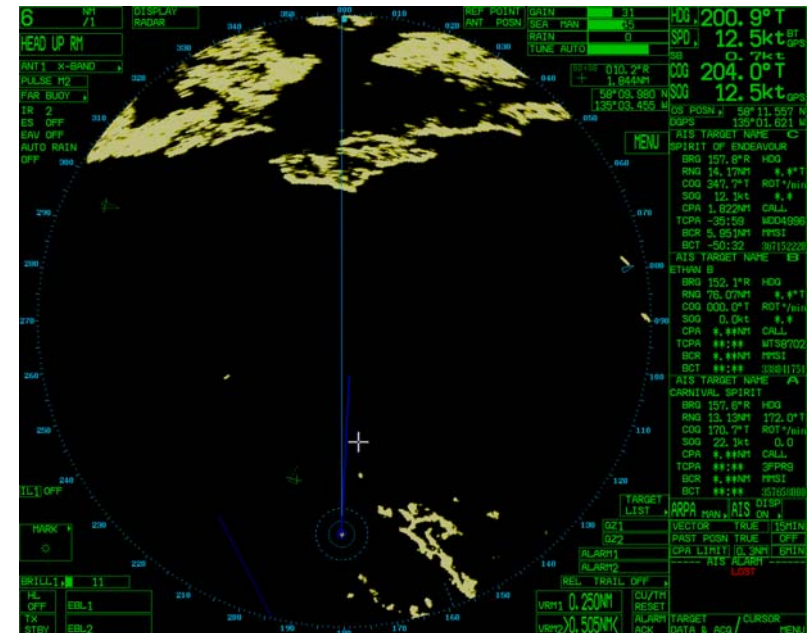
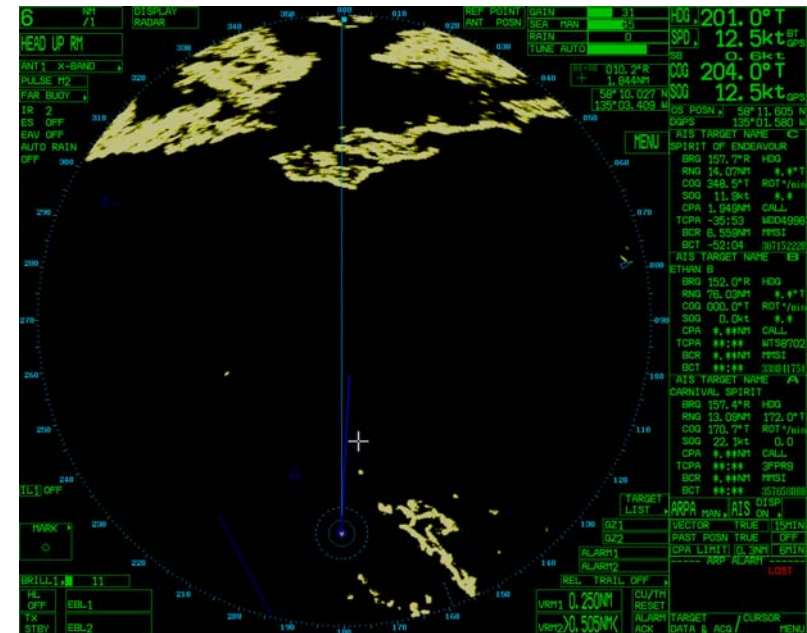
3M-1

yeah it's a fishing boat.

0123:57

AB-1

yeah they have these uh really really bright lights so that they can pull their gear at night.



0124:01
3M-1

Communication

0124:03
AB-1

un huh.

0124:06
3M-1

and then the other vessel to the right of that is that who is showing up on AIS?

0124:11
AB-1

no fishing boats don't normally have AIS.

0124:12
3M-1

so that's two separate fishing boats out there?

0124:15
AB-1

yeah I think so.

0124:16
3M-1

and they're in the uh and that uhhh they're heading up into the Icy Strait or?

0124:25
AB-1

well one of them's pulling gear * you know 'cause he's got his light on there.

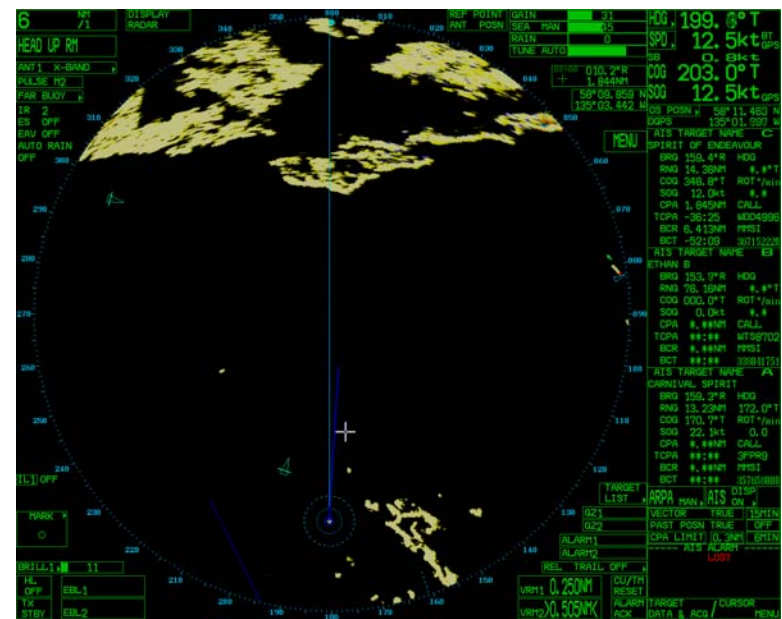
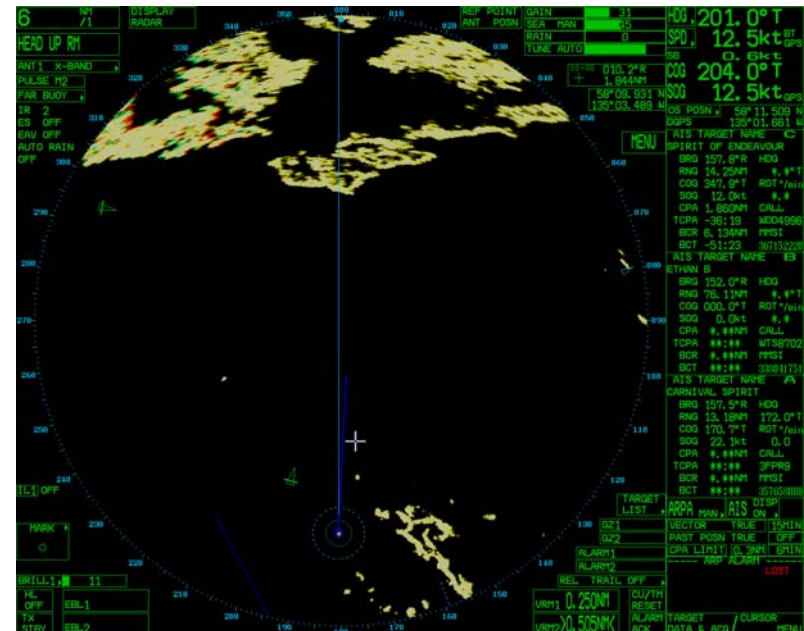
0124:29
3M-1

umkay.

0124:29
AB-1

and uh the other one is uh that was probably the two vessels they were probably talking he was probably trying to get the other one's attention. a lot of times when they're pulling gear the uh the fishing vessel won't talk to you. they won't even be in their # wheelhouse. so you gotta light 'em up.

Radar Imagery



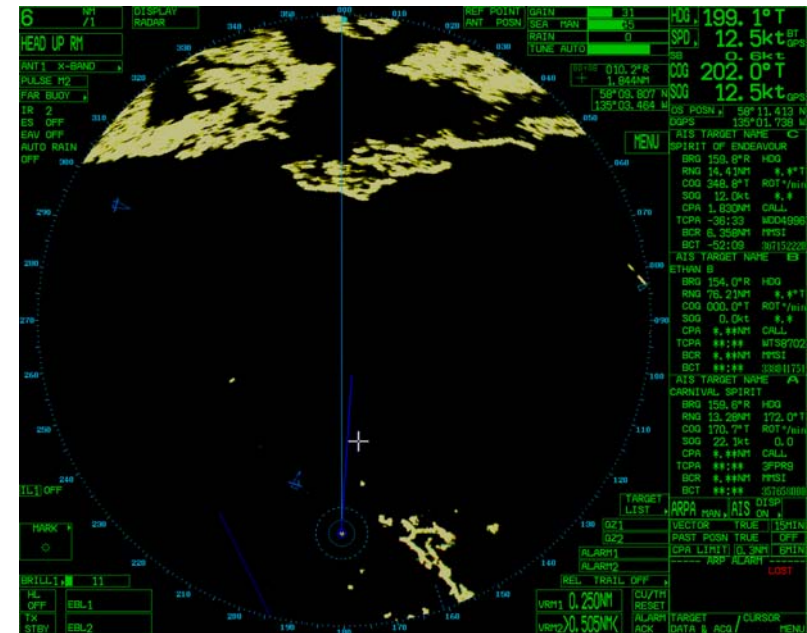
TIME and Source

0124:31
3M-1

Communication

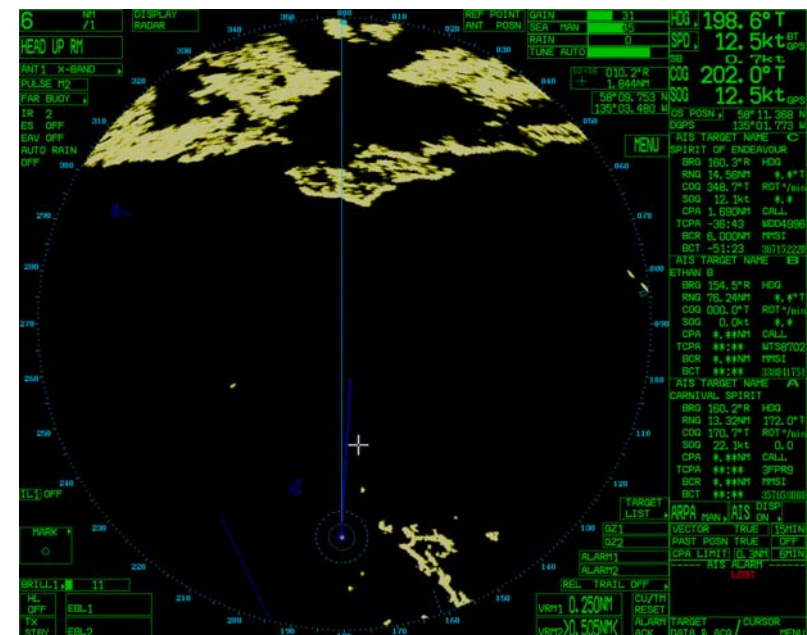
*...yeah. man this one time when we were going through the South China Sea when I was on watch probably the same watch as this one and uh way up ahead in the distance we could see it looked like a like a city all up on— its just on the horizon. and then we get up to it and they got some real bright white lights brighter than that that has a yellow uh hint to it it's a real bright white and there's thousands of fishing boats all around and we start going through them it was lit up like a stadium as far as we could see. I mean you stand on deck and you can see your shadow 'cause it was so bright.

Radar Imagery



0124:59
AB-1

yeah...oh...that's kind of spooky.

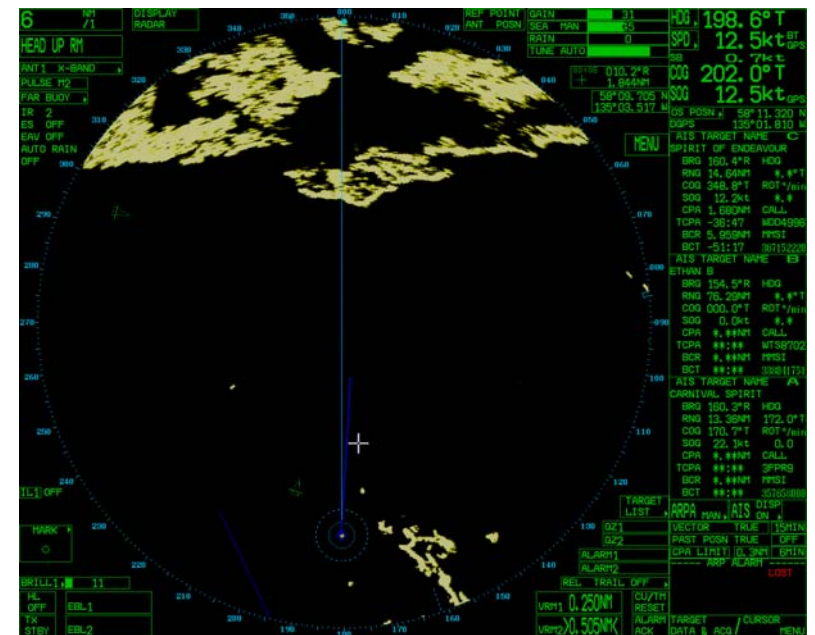


TIME and
Source

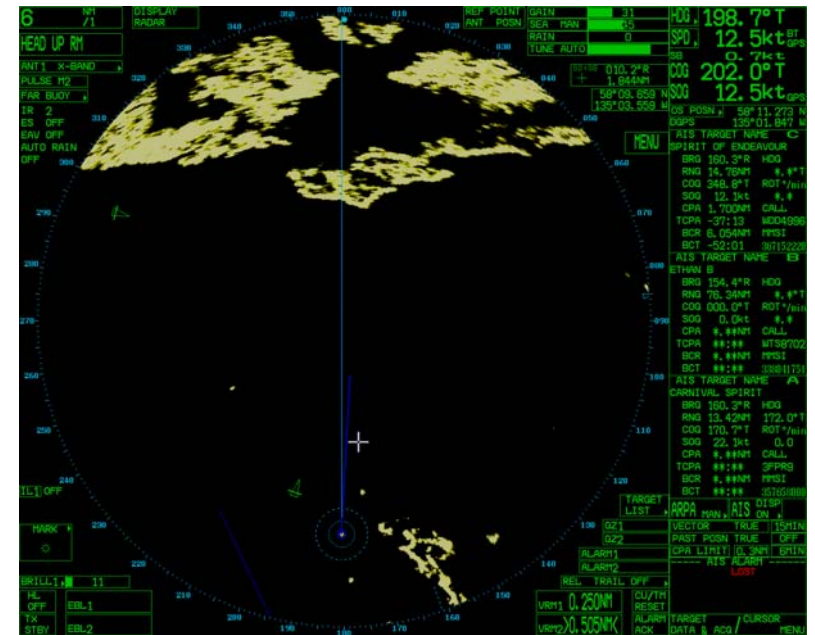
0125:00

Communication

Radar Imagery



0125:15



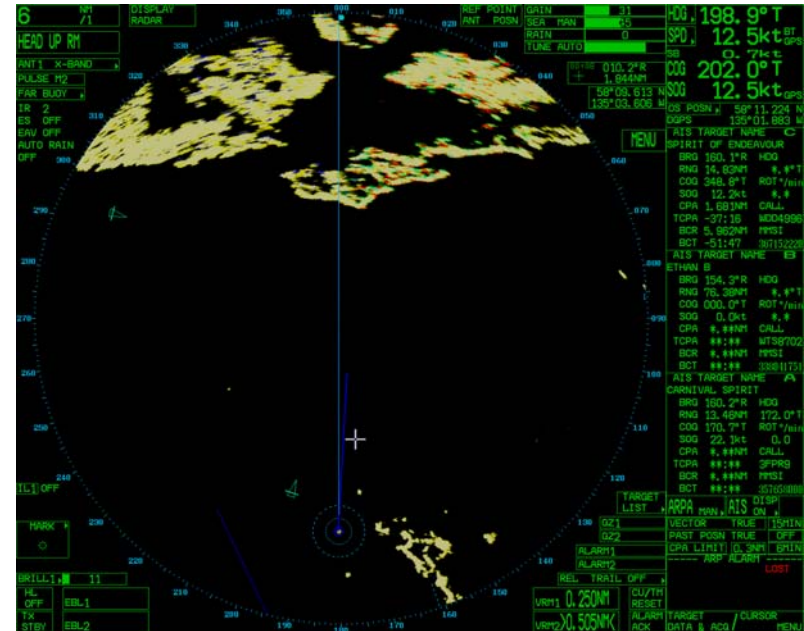
TIME and
Source

Communication

Radar Imagery

0125:41
3M-1

yeah it was weird it really was. and then right off the coast of Mexico—. what 'cha got?

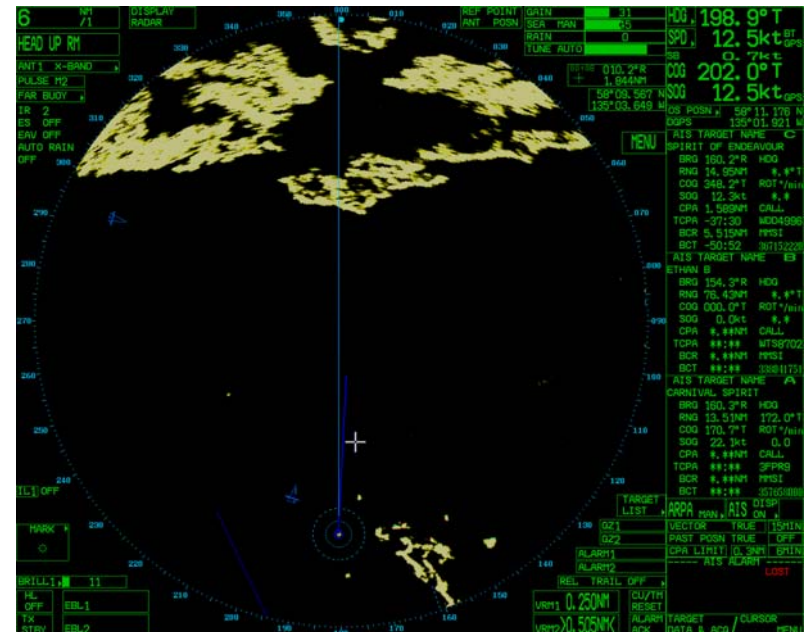


0125:51
AB-1

what's that? oh I'm just lookin' at the * here. *

0125:55
3M-1

right off right off the coast of Mexico we were going through some fishing boats too and they had all their lights off but we got em on radar and then uh there was this one guy who threw gasoline overboard and lit it so we could see him.



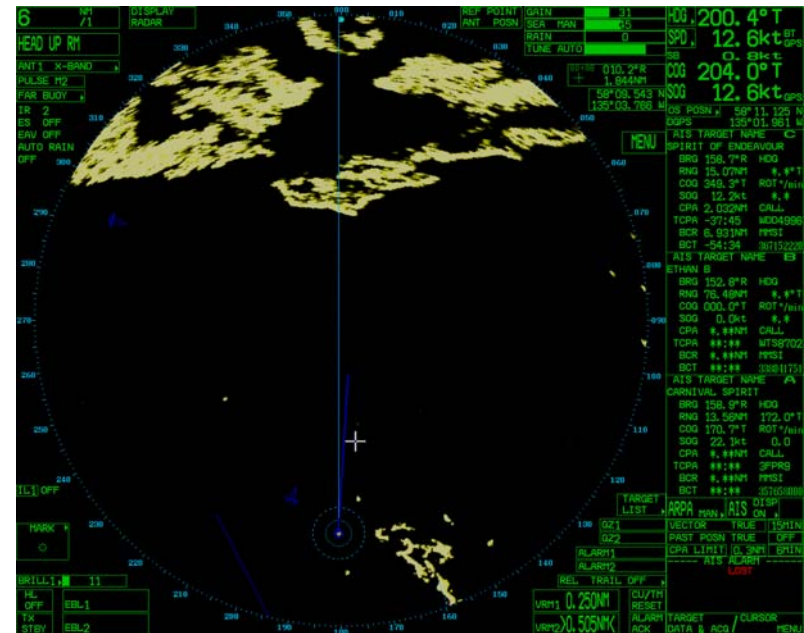
TIME and
Source

Communication

Radar Imagery

0126:12
AB-1

Jesus. that's wild. yeah down there in the Gulf of Mexico you got to watch out for the shrimpers.

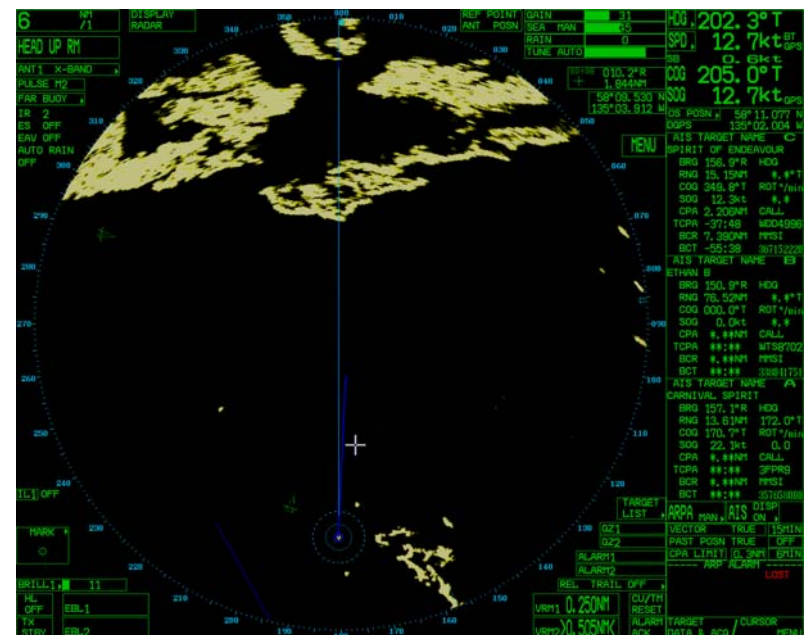


0126:23
3M-1

oh yeah.

0126:24
AB-1

yeah. I'm kind of comin' on the inside of our turn here comin' around.



0126:27
3M-1

okay. **. flashing green ** yup there it is.

TIME and
Source

Communication

Radar Imagery

0126:43

AB-1

that is our flashing green isn't it?

0126:43

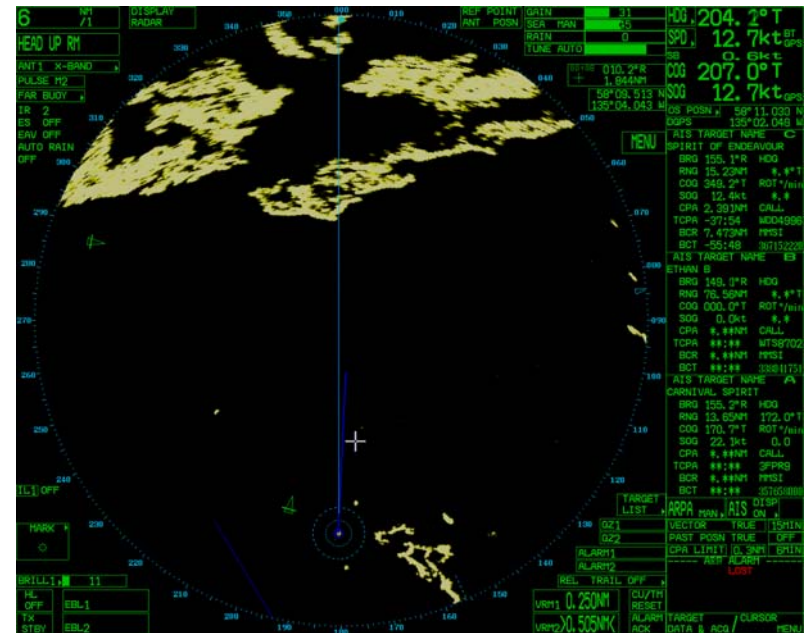
3M-1

yup.

0126:44

AB-1

way up there.



0126:48

3M-1

yeah broad on the starboard bow.

0126:52

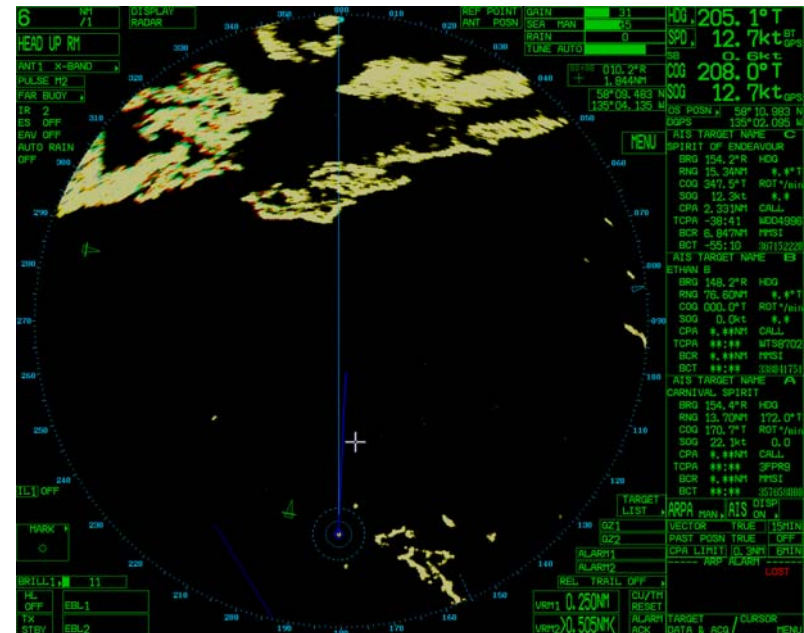
3M-1

we'll pass inside of that.

0126:53

AB-1

yup.



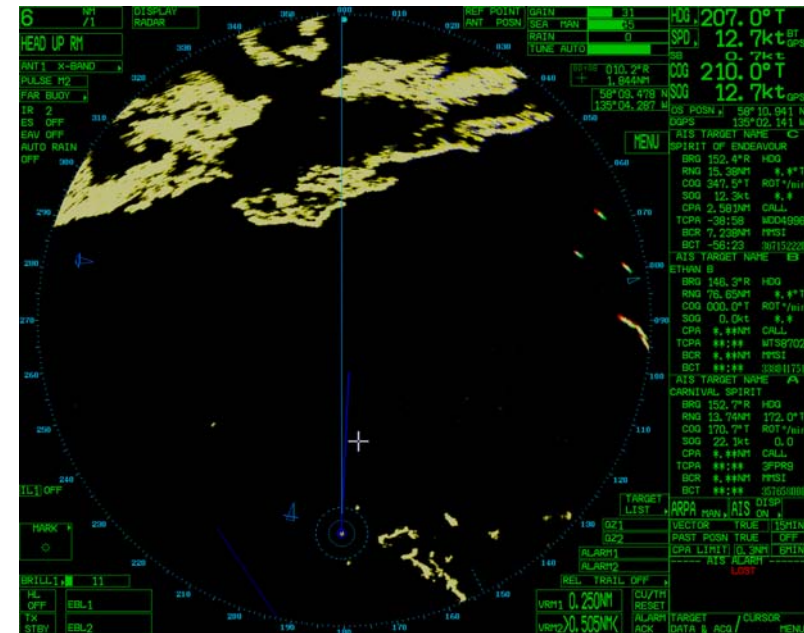
TIME and
Source

0127:12
3M-1

Communication

are these depths? on there are those in feet or they in uh fathoms?

Radar Imagery

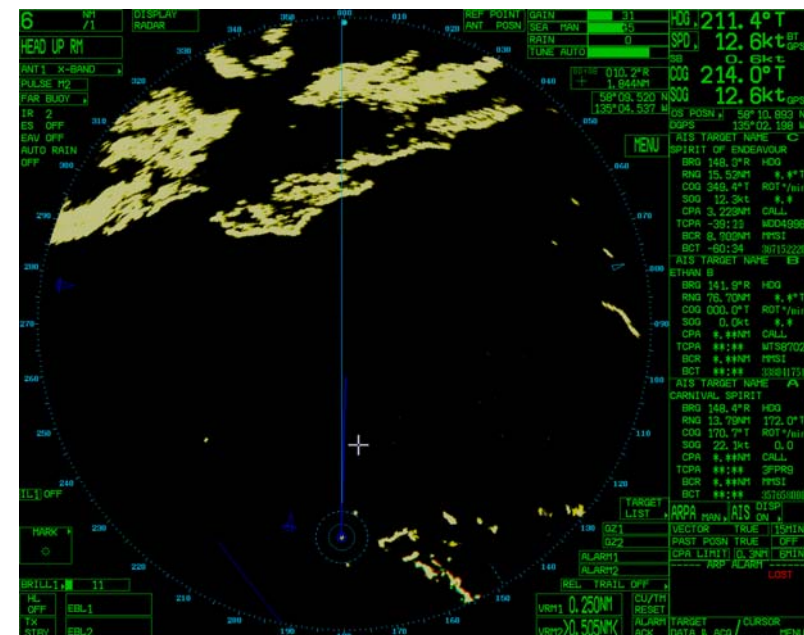


0127:19
AB-1

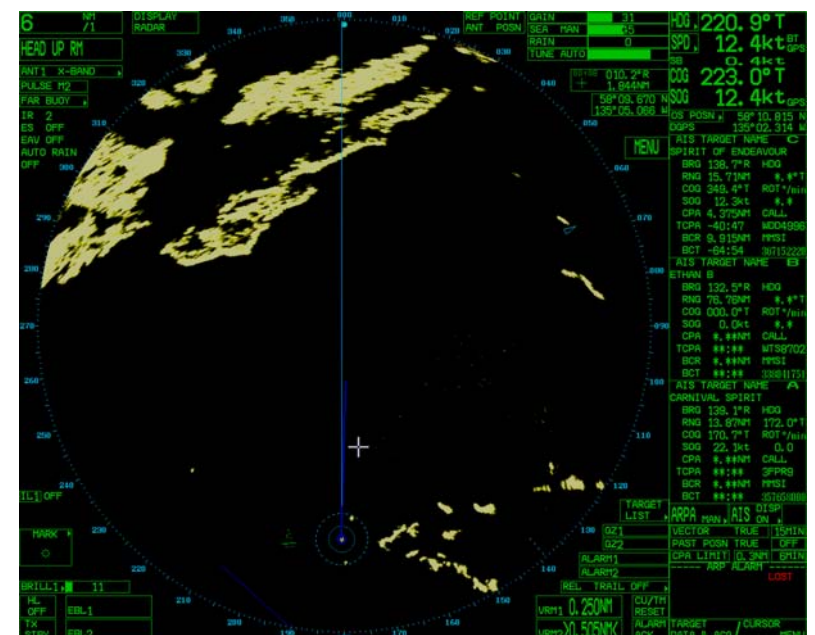
fathoms.

0127:20
3M-1

oh # got plenty of water.

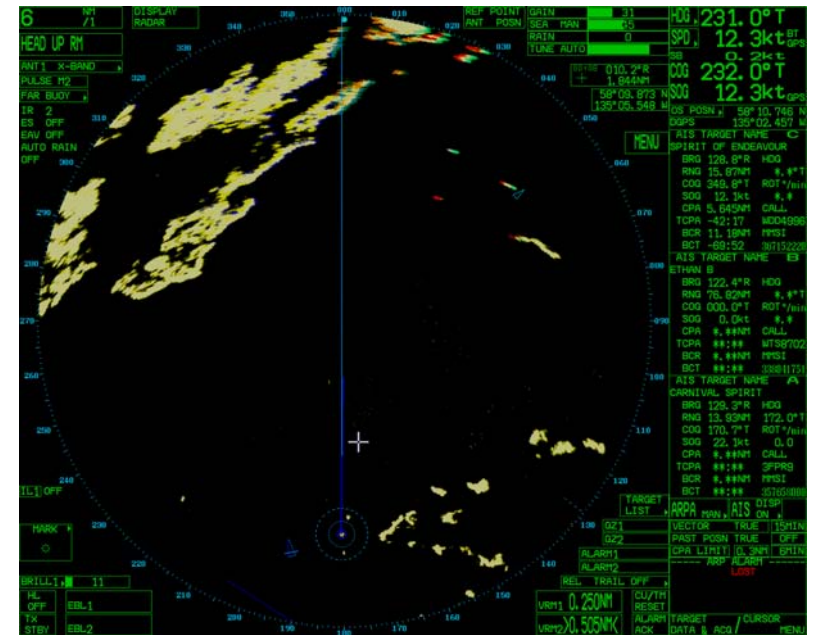


0127:30

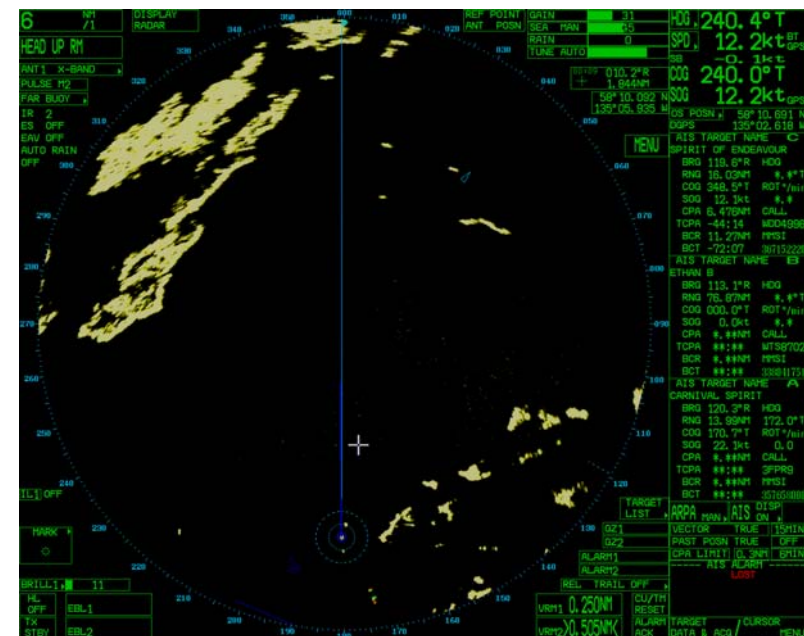


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0128:00



0128:30



0128:55
3M-1

comin' around fast enough you think?

yeah.

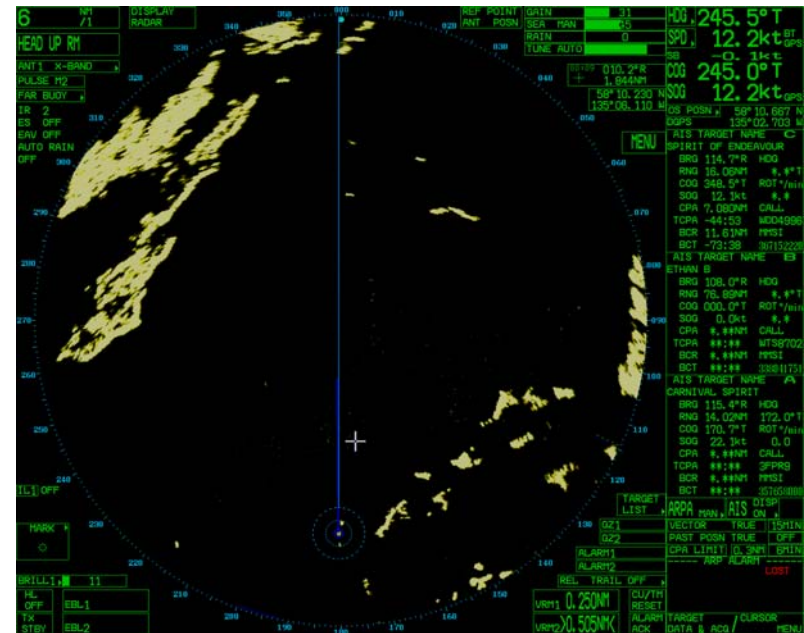
TIME and Source

0129:06
3M-1

turn it down *.

Communication

Radar Imagery

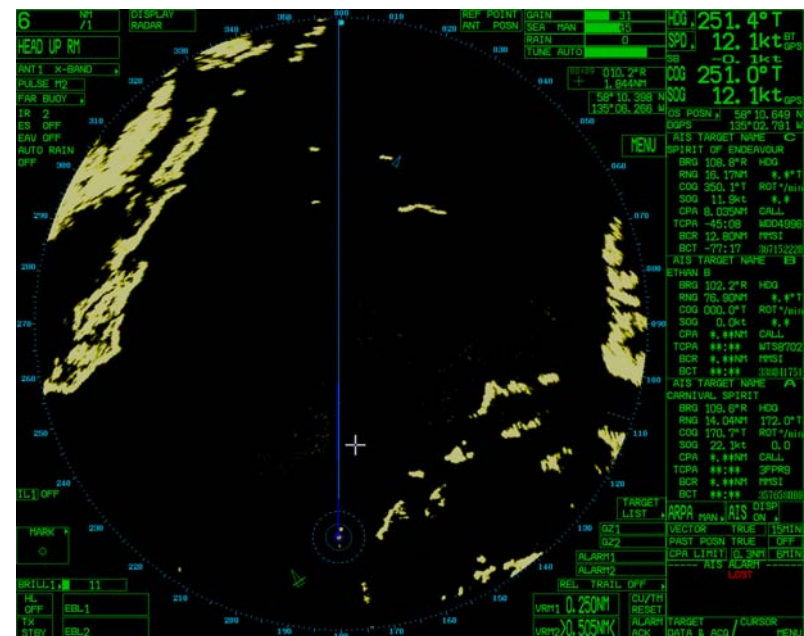


0129:27
AB-1

I don't think so.

0129:28
3M-1

you don't think so?



TIME and
Source

Communication

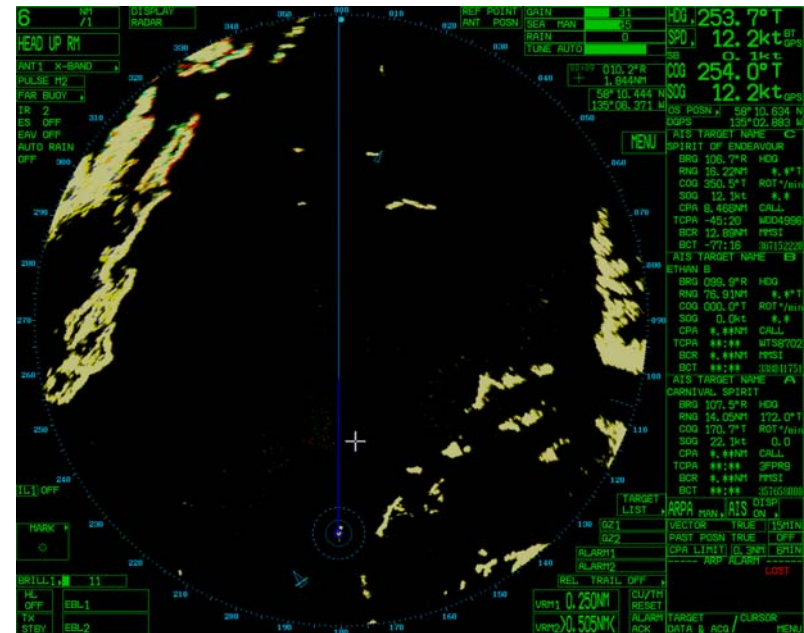
Radar Imagery

0129:30
AB-1

no.

0129:44
AB-1

we should go on that side. whaddyou think?



0129:52
3M-1

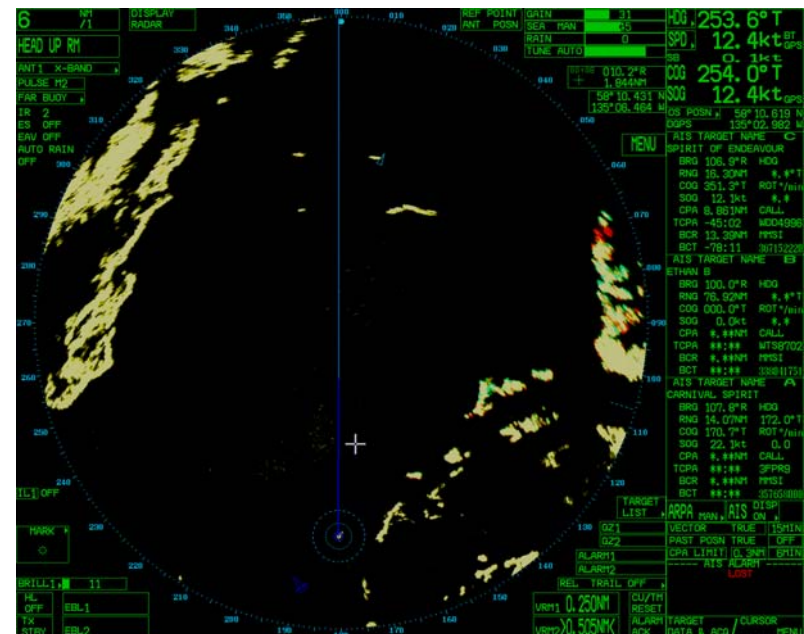
yeah let's just steady up on this until we clear that light.

0129:58
3M-1

oh come left.

0129:59
AB-1

comin' left.



TIME and
Source

Communication

Radar Imagery

0130:02
3M-1 hard left.

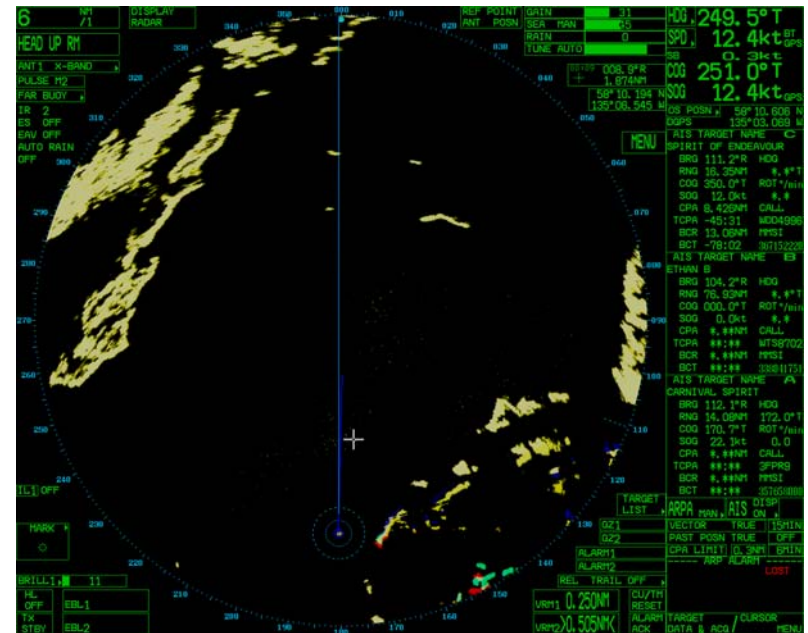
0130:03
AB-1 hard left.

0130:07
3M-1 yeah we're real close. we better call the captain. we better call the captain.

0130:10
AB-1 oh #.

0130:11
3M-1 call the captain.

0130:13
[sound of impact]



0130:16
[sound similar multiple warning alarms from GE console]

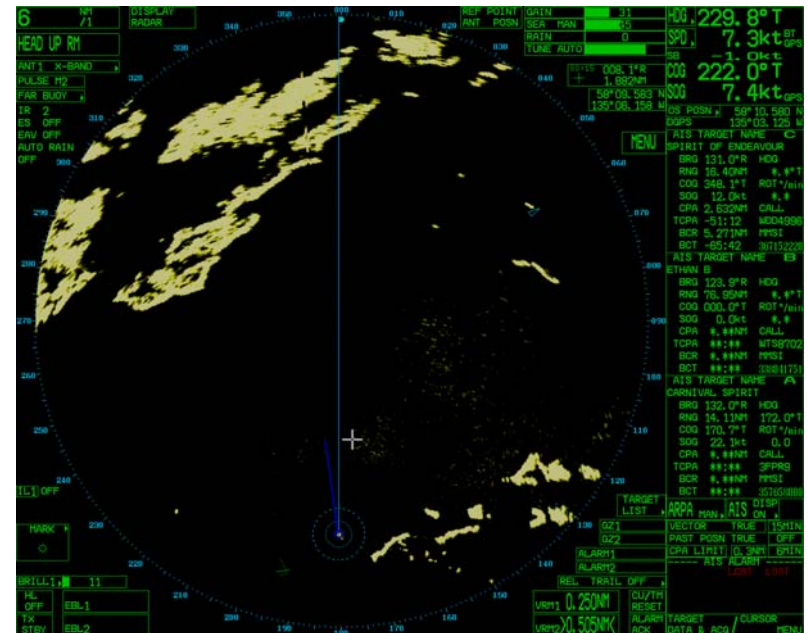
0130:21
? want your radio.

0130:23
3M-1 oh God.

0130:25
? * captain *.

0130:29
? captain.

0130:29
AB-1 oh he knows he's comin'.



TIME and
Source

Communication

Radar Imagery

0130:30

CPT

what was that? what was that?

0130:30

?

that was the rocks sir.

0130:32

CPT

the rocks.

0130:36

3M-1

** rocks.

0130:37

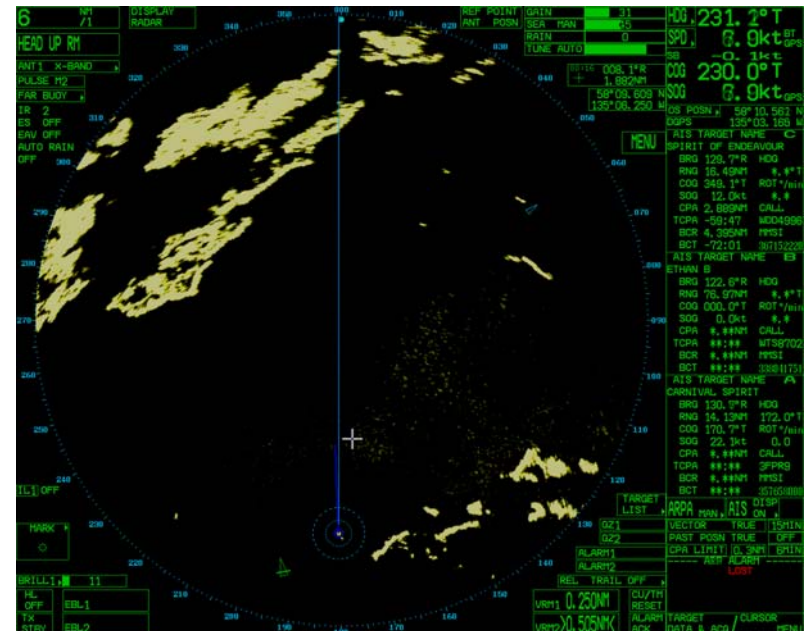
CPT

stop.

0130:38

AB-1

stop stop stop.



0130:45

CPT

we got to call the Coast Guard...hold it hold it here.

0130:46

?

okay.

0130:47

CPT

hold it.

0130:56

UHF-?

report.

0130:59

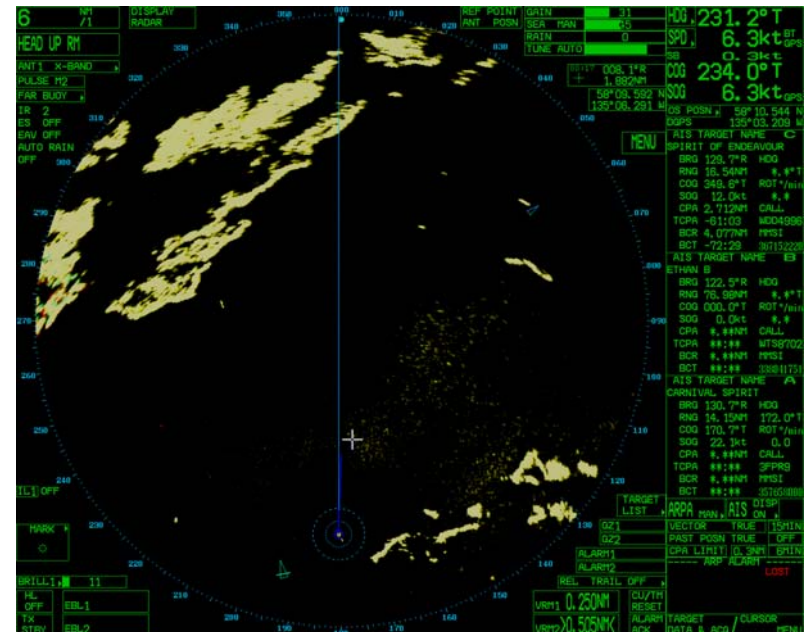
?

we just came inside the rocks.

0130:59

?

*



TIME and
Source

Communication

Radar Imagery

0131:00 ?	what do we do now?
0131:03 3M-1	did you take the thrust off?
0131:04 AB-1	yes the thrust is off.
0131:05 3M-1	okay.
0131:09 ?	station bill.
0131:10 ?	'kay.
0131:13 OS	you wanna like get some of these alarms?
0131:14 3M-1	no don't don't don't touch anything.
0131:18 OS	all right.
0131:23 ?	**.
0131:25 CPT	augh get my radio.
0131:30	[sound similar to bridge phone]
0131:31 ?	I don't like *.
0131:31 CPT	get my radio from the office.
0131:34 AB-1	got it.

TIME and
Source

Communication

Radar Imagery

0131:39 CPT	water in bilge void number one okay. we need to take uh take down a uh someone needs to start writing this down.
0131:50 ?	okay.
0131:52 CPT	what? can you start sounding tanks please right away. sound tanks right away.
0132:04 Crew PA-CPT	yeah crew all crew all crew this is an emergency this is an emergency I repeat this is an emergency. all crew members wake up get dressed wake up and get dressed...
0132:19 UHF-?	bridge deck bridge deck.
0132:24 UHF-CM	go from the bridge.
UHF-?	yeah we've got a breach in room nineteen.
0132:29 UHF-CM	roger that.
0132:29 Crew PA-CPT	...wake up get dressed and get your life jackets and come up to port side. wake up.
0132:30 CM	breach water's comin' in room nineteen.
0132:33 OS	cap I can't find the radio.
0132:35 CPT	its on my vest which could be in the uh thing.
0132:38 OS	all right.
0132:51 UHF-?	**.
0132:52 ?	**

<u>TIME and Source</u>	<u>Communication</u>	<u>Radar Imagery</u>
0132:54 UHF-OIL	** I'm opening watertight number one.	
0132:55 UHF-CE	negative.	
0132:57 UHF-OIL	I'm opening watertight number one.	
0133:02 UHF-?	Matt don't open it.	
0133:08 VHF-CPT	pan pan pan pan pan pan.	
0133:15 CPT	turn that down please.	
0133:18 VHF-CPT	this is the Empress of the North. Empress of the North. we have an emergency aboard. an emergency aboard. we are— .	
0133:26 ?	*.	
0133:34 CPT	what's the name of this rock and where?	
0133:35 ?	Coouverdeeeran.	
0133:37 CPT	its what?	
0133:39 VHF-USCG	Empress of the North United States Coast Guard Sector Juneau what's your emergency over?	
0133:43 VHF-CPT	Coast Guard Sector Juneau Empress of the North we have uh hit some rocks. we have uh holed our vessel. we have holed our vessel...our our position is fifty eight degrees one zero point four north one three five zero three point five minutes west.	
0133:44 ?	[sound of unintelligible conversation]	
0133:53 UHF-?	sounding deep * right now.	

TIME and
Source

Communication

Radar Imagery

0134:14 VHF-USCG	Empress of the North Sector Juneau roger how many souls on board over?
0134:15 CPT	people on board?
0134:21 3M-1	uh two hundred eighty four uh two hundred eighty one.
0134:24 VHF-CPT	uh we have two hundred eighty one persons on board at this time two hundred eighty one persons on board. we are— we have holed our vessel we are taking on water.
0134:36 CPT	what's the name of this rock here?
0134:39 3M-1	Cour—.
0134:41 CPT	what?
0134:45 3M-1	Courvedeer— Cour— Courvedon Rock.
0134:45 CPT	Courvedon?
0134:46 3M-1	C-O-U—.
0134:49 VHF-USCG	Empress of the North Sector Juneau can I get description of your vessel over?
0134:53 ?	hundred miles *.
0134:51 VHF-CPT	description of the vessel is a three hundred sixty foot three hundred and sixty foot paddlewheel vessel and uh we're white hull white hull with three decks over.
0135:00 UHF-?	chief mate.
0135:04 UHF-CM	go.

TIME and
Source

Communication

Radar Imagery

0135:15 3M-1	actually I think this might be Han— Hanus.	
0135:18 UHF-CPT	'kay uh engineering bridge uh please continue sounding all tanks.	
0135:24 VHF-USCG	Empress of the North Sector Juneau roger what's on scene weather over?	
0135:29 CPT	on scene weather.	
0135:37 CPT	is it raining is it what's going on?	
0135:39	[bridge alarms are silenced]	
0135:44 3M-2	little bit of rain. overcast.	
0135:44 CPT	what's the wind and uhh?	
0135:47	[sound similar to bridge phone]	
0135:50 VHF-CPT	Sector Juneau we have zero wind we have uh drizzle and uh its calm outside. we have uh drizzle at this time. seas and swells are slight calm and a uh slight chop.	
0136:03	[background music is silenced]	
0136:18 CPT	okay so we have uh awww we got the crew up.	
0136:26 ?	passengers are up too captain.	
0136:27 VHF-USCG	Empress of the North Sector Juneau do you have any idea * or how much longer you'll have until you have to abandon over?	
0136:35 VHF-CPT	negative we don't know at this time. we are showing an alarm in one bilge void in one bilge void. that's all we got so far. we are not listing we are cur— currently sounding tanks.	

<u>TIME and Source</u>	<u>Communication</u>	<u>Radar Imagery</u>
0136:21 UHF-CM	bridge chief mate.	
0136:50 UHF-3M-2	chief mate bridge. chief mate bridge.	
0137:01	[sound similar to fire system alarm lasting ten seconds]	
0137:01 UHF-CPT	chief mate go ahead.	
0137:05 UHF-CM	yes captain chief mate here room one nineteen oh excuse me one nine uh there's air *. ** top side starboard side that area **.	
0137:13 VHF-USCG	Empress of the North Sector Juneau roger ** stand by over.	
0137:22 VHF-CPT	yeah roger we're standing by.	
0137:22 CPT	yeah what room was he in?	
0137:26 VHF-ES	Empress of the North Evening Star on sixteen do you copy?	
0137:26 VHF-CPT	Evening Star Empress of the North.	
0137:30 VHF-ES	roger I'm only five miles from your position. I see you * we are fifty-six foot fishing vessel would you like me to come by and stand by for an assist possibly.	
0137:37 VHF-CPT	Evening Star Empress of the North roger please come by and stand by.	
0137:44 VHF-ES	roger we're en route to your position should be about twenty-five minutes we'll be there.	
1037:48 CPT	let's flip out er uh someone go up there on the deck and flip out all our lights our emergency lights.	
0137:55 3M-2	* over here.	

TIME and
Source

Communication

Radar Imagery

0137:59

CPT

yeah these.

0138:05

3M-2

captain.

0138:22

PA-CPT

ladies and gentlemen ladies and gentlemen. this is the captain we are on the bridge there has been an emergency on board at this time. please do not panic everything is okay ladies and gentlemen. we wanted to inform you that uh we have uh run aground and uh folks that uh we are sounding our tanks and doing everything we can *. please stand by for further instructions at this time please just stand by for further instructions.

0138:47

VHF-ES

Empress of the North Evening Star can I get your position one more time please?

0138:59

VHF-CPT

yeah Evening Star Empress of the North we are fif— five eight degrees one zero point two minutes north one three five three zero three one three five degrees zero three point zero six minutes west.

0139:24

CPT

what is the name of that rock? * the name of the rock.

0139:25

VHF-ES

roger that bottom number was one three five point zero three point one five correct?

0139:32

VHF-CPT

that is one three five degrees zero three point six minutes west.

0139:36

VHF-ES

roger we're en route.

0139:41

CPT

um the name of the rock on the bottom.

0139:44

3M-1

isn't it uhh Hanus Reef?

0139:45

CPT

Hanus?

0139:45

VHF-USCG

Empress of the North Sector Juneau can I get your geographical position over?

0139:47

3M-1

H-A-N-U-S reef.

<u>TIME and Source</u>	<u>Communication</u>	<u>Radar Imagery</u>
0139:52 CPT	Hanus.	
0139:59 VHF-CPT	Sector Juneau Empress of the North say again.	
0140:02 VHF-USCG	Empress of the North Sector Juneau can I get your geographical position over?	
0140:09 VHF-CPT	roger we're just south of Hanus Hanus Rock just south of Hanus Rock. that is what we uh came against over.	
0140:22 CPT	man we are #.	
0140:26 VHF-USCG	Empress of the North Sector Juneau uh can you spell that for me over?	
0140:30 CPT	spell that for me.	
0140:34 3M-1	H-A-N-U-S.	
0140:39 VHF-CPT	roger that's H-A-N-U-S.	
0140:41 CPT	its the bottom end of what's the island or that peninsula at the bottom down there? we're just—.	
0140:48 VHF-USCG	Empress of the North Sector Juneau roger stand by.	
0140:59 CPT	** Icy Straits at the bottom *.	
0141:03 VHF-USCG	[sound of VHF-USCG pan pan announcement]	
0141:08 CPT	okay so...we're gonna go for an evacuation *.	
0141:13 ?	do you want the rafts launched?	

TIME and
Source

Communication

Radar Imagery

0141:20

CPT

no nope not at this time. okay we're gonna go for an evacuation. I mean we muster the people into the—.

0141:27

2M

evacuation stations.

0141:30

CPT

we need to get ready to uh get ready to uh evacuate.

0141:35

3M-2

okay why don't we uh we need to pass the word captain. have them get dressed and get their life jackets.

0141:44

CPT

yeah.

0141:49

PA-CPT

attention on board the Empress of the North this is the captain on the bridge. I'd like to ask that all passengers all passengers will please get dressed at this time. I'd like to ask and this is a precaution at this point because we haven't uh done a full— haven't don't a full damage control on exactly what is going on. we are have Coast Guard and other rescue personnel en en route to assist us. I would like to ask you all to please put on your clothing and if you would to collect your life jackets located inside your armoire and slowly and uh if you would please quietly work our way down to our muster stations. that there we're gonna make sure everyone is down there. please do this orderly and uh calmly work your way down to all those forward of the main stair tower go forward down the forward ladder outside ladder and into the showroom. all those aft of the main stair tower please move forward and down the uh stair tower and go in to the showroom er into the dining room. there you will be accounted for. ladies and gentlemen please help us do this safely and calmly we have plenty plenty of time ladies and gentlemen this is just a precaution.

0143:34

UHF-CPT

okay crew uh we're going to uh yeah.

0143:39

UHF-?

what was that?

0143:40

UHF-CPT

we're going to move into an evacuation. I want you all to start calmly helping people to the evacuation stations.

0143:51

3M-2

we're taking—.

0143:53

CPT

we're starting to list can we note that we're starting to list?

0144:05

VHF-CPT

yeah this is the Empress of the North back roger I turned the radio down I was making a making a uh announcements to our passengers. we have had all passengers all passengers have are getting dressed and are getting their life jackets and we are proceeding to our muster stations where we will account for all passengers over. Sector Juneau Empress of the North please be advised we are we are uh sounding tanks at this time. we are hearing we have definitely breached the hull we have water in some void areas. we are slowly starting to list.

TIME and
Source

Communication

Radar Imagery

0144:56

CPT

okay so uh ** okay so uh we need um we need ** emergency evacuation procedures * they're in our SMS. [stepped on by VHF communication]
...um we need to make sure—.

0145:45

?

captain do you mind if we—.

0145:47

CPT

what's that? * all the deck lights on all the outside lights on there.

0152:00

[captain orders IBA and slide launched]

0157:03

[chief mate reports port side IBA launched]

0159:12

[captain orders rafts to be launched]

0201:16

[crew reports first raft in the water]

0201:16

END OF TRANSCRIPT

1258:00

END OF RECORDING

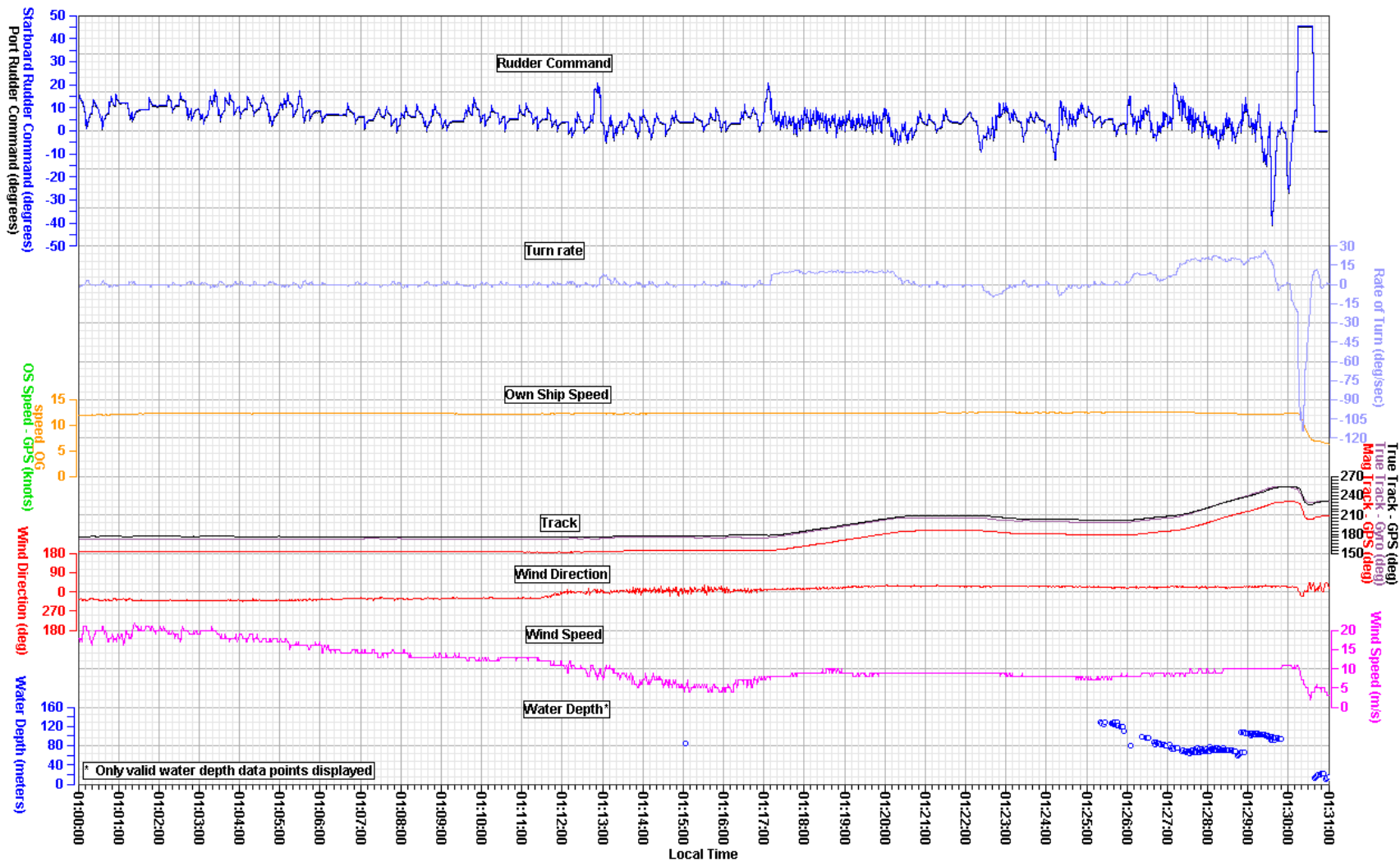
Appendix B

NMEA Parametric Data Plots

Empress of the North, Icy Straits, Alaska, 05/14/07

Location, Date: Icy Straits, Alaska, 05/14/07

NTSB No. DCA07MM015



Revised: 22 August 2007

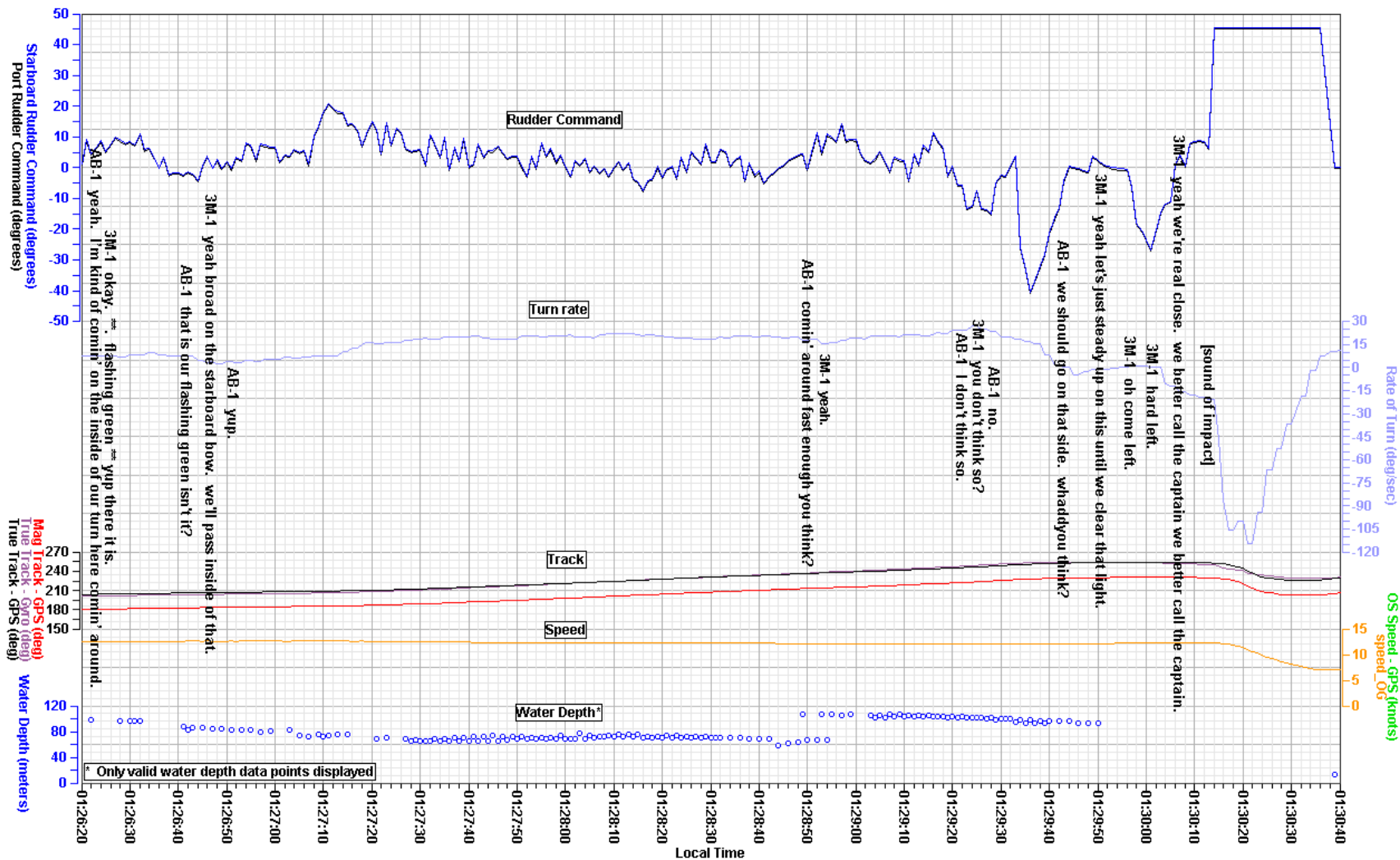
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Figure 1 NMEA parametric data for thirty minutes prior to grounding

Empress of the North, Icy Straits, Alaska, 05/14/07

Location, Date: Icy Straits, Alaska, 05/14/07

NTSB No. DCA07MM015



Revised: 22 August 2007

National Transportation Safety Board

Figure 2 NMEA parametric data for four minutes prior to ground with selected bridge audio overlay